THE TAILOR AND CUTTER

ACADEMY

SYSTEMS OF CUTTING

ALL KINDS OF

TAILOR-MADE GARMENTS

PART I

DEALING WITH THE CUTTING AND MAKING OF ALL KINDS OF TROUSERS, BREECHES, LEGGINGS, GAITERS, VESTS, CAPS, ETC.

BY

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Rob Jezsik

AUTHOR'S PREFACE.

THIS work is the outcome of the experience gained by the publication of many previous books. In it I have tried to embody some improvements that have been suggested by my many friends. The systems are all well tried, and may be depended upon to produce all that can be expected of any system. They are described in the most concise manner, and are accompanied by such hints on making as should render the production of the garment an easy matter. This first part is devoted to the cutting of what is generally known as small jobs, viz., trousers, vests, &c., and is consequently the part that will be most used by the aspirant for sartorial fame at the commencement of his studies. I have therefore tried to make it as clear and simple as possible and at the same time a worthy forerunner of the succeeding parts.

W. D. F. VINCENT.

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The Tailor and Cutter Academy

SYSTEMS OF CUTTING

Trousers, Breeches, Gaiters and Vests.

THE object of this work is to provide the student and the experienced cutter alike with a maximum of information in the most concise manner.

A book that shall explicitly describe and practically illustrate every garment they may be required to cut and make in everyday experience.

To accomplish this object I have resorted to the use of diagrams freely, believing that more may be conveyed in that way than in pages of descriptive letterpress.

Special attention has been given to the details so that my readers may rely upon them with the fullest confidence.

My description of the diagrams is terse and to the point, leaving theorising and debating for other channels, and devoting the pages exclusively to the practical and helpful.

I follow the same course as is usually followed in teaching the student, taking the simpler garments first and advancing to the more complex.

Thus the opening pages are devoted to the treatment of Trousers and Breeches, which are followed by Gaiters, Leggings, and Vests.

MEASURES FOR TROUSERS.

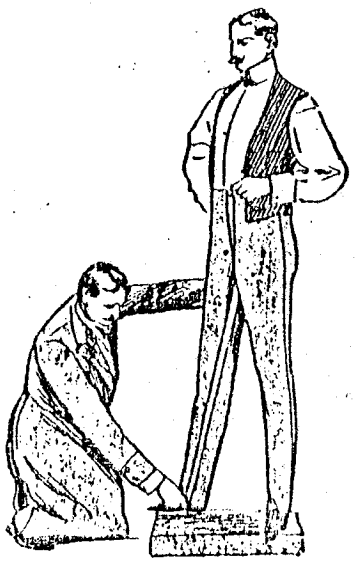
Before measuring obtain a clear idea of what is required, as large-bottom trousers must be longer in the legs than small bottoms.

The following order is the usual one: Side length, Fig. 1;

leg length, Fig. 2; waist, Fig. 3; seat, Fig. 4; fashion size of knee, Fig. 5; and bottom, Fig. 6, thus:
44, 32, 30, 36, 18, 17.

FOR BREECHES.

The side length may be taken to the full length only.
The leg length taken from fork to knee, fork to small, fork to calf, fork to full length.



Full length at Side.
FIG. 1.

Length of Leg.
FIG. 2.

The tight size of knee: Small; calf and bottom should be taken over the bare leg.
Here is a sample set of measures:
39, side to bottom; 15, 17, 20, 27, leg lengths.
30, 36, 14, 12, 14, 10, widths,

FOR GAITERS.

The necessary measures are length, size of calf, ankle and bottom.

Siz of Waist.
FIG. 3.

Size of Seat.
FIG. 4.

Size of Knee.
FIG. 5.

Size of Bottoms.
Fig. 6.

The following scale will prove useful for reference.

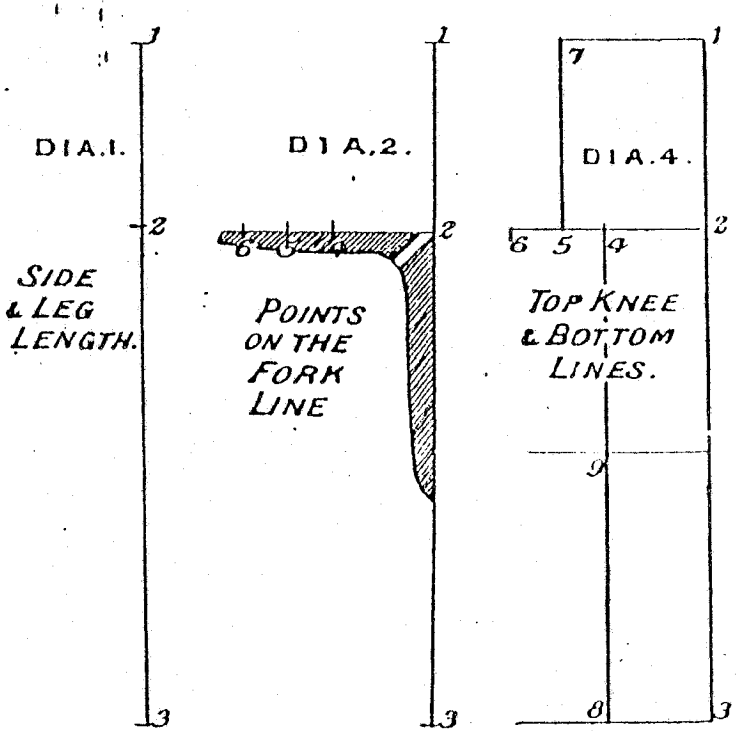
Size	000	7	5	7	11	2	3	4	5	6	7	8	COPYRIGHT	
Waist	23	24	25½	27	28	28½	29½	32	34	37	39½	42	46	50	54
Seat	23	24½	26½	28¾	31	33	35	37	39	41	43	45	47	49	51
Side Trousers	22½	27½	32½	36½	38½	40	42	43½	44	45	45½	46	45½	47	47½
Leg	15½	19½	23¼	26½	28	29½	30½	31½	32	33	33½	34	33½	33	32½
Knee	10½	11½	12	13	14	15½	16½	17½	18	19	20	21	21½	22	22½
Bottom	10	10½	11½	12½	13½	14	15½	16½	17½	18½	19	20	20½	21	21½
Right Knee	8¾	9½	10¼	11	12	12½	13½	14½	15½	16	16¾	16¾	17½	17½	18
Small	8	8¾	9½	10¼	10¾	11¼	11¾	12¾	13¼	13¾	14¼	14¾	15¼	15¾	16¼
Calf	8½	9¼	10	11	12	13	14	15	15½	16	16½	17	17½	17½	18

Breeches length to Small half leg length; Knee 2 inches higher Calf 5 inches lower

When booking orders especial care should be taken to record all the details, so that customer's expressed wishes may be carried out.

THE TROUSERS SYSTEM BY EASY STAGES.

Draw line 1, 2, 3, and mark off. 1 to 3 the side length, and 3 to 2 the leg length. Diagram 1.

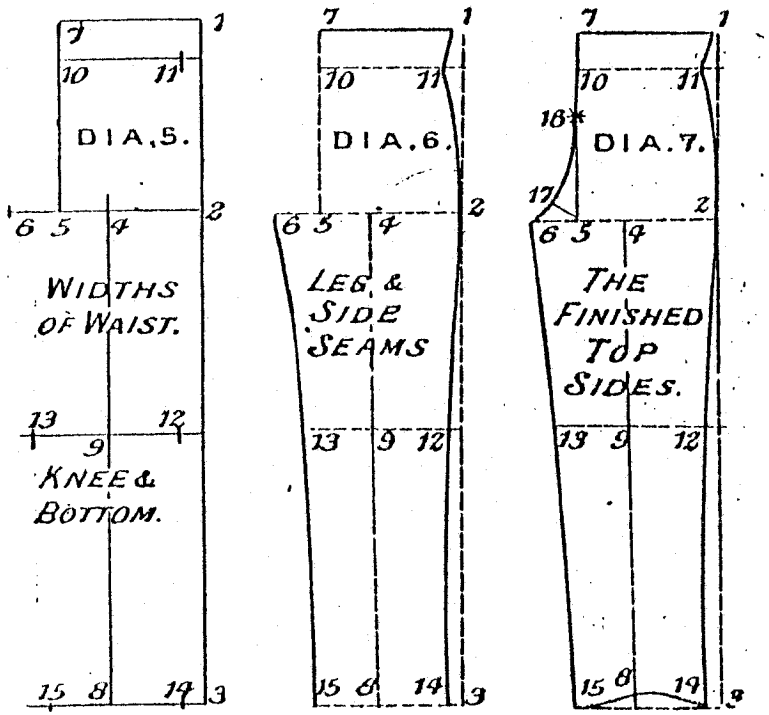


Square across from 2 at right angles to 2, 3.
2 to 4 is one-sixth seat. 2 to 5 one-fourth seat.
2 to 6 one-third seat plus ¼ inch. Diagram 2.
Square down from 4 to 8, and up from 5, as Diagram 4.
Square from 7 to 1. 4 to 9 ½ half leg length less 2 inches.
Square at right angles to 9 and 8. Diagram 3.
10 to 11 one-fourth waist. 9 to 12 and 9 to 13 each one-fourth of the knee.

8 to 14, one-fourth of the bottom.

8 to 15 one-fourth of the bottom less a quarter-inch. Diagram 5.

Draw leg seam straight from 15 through 13, and give it the necessary curve outwards to meet 6.



Shape sideseam, give a little spring above 11, curve over the hips, and complete the sideseam by a graceful hollow. Diagram 6.

Shape over the foot according to the size and style of the bottom; if hollowed, make the hollowest part 1 inch the sideseam side of centre line.

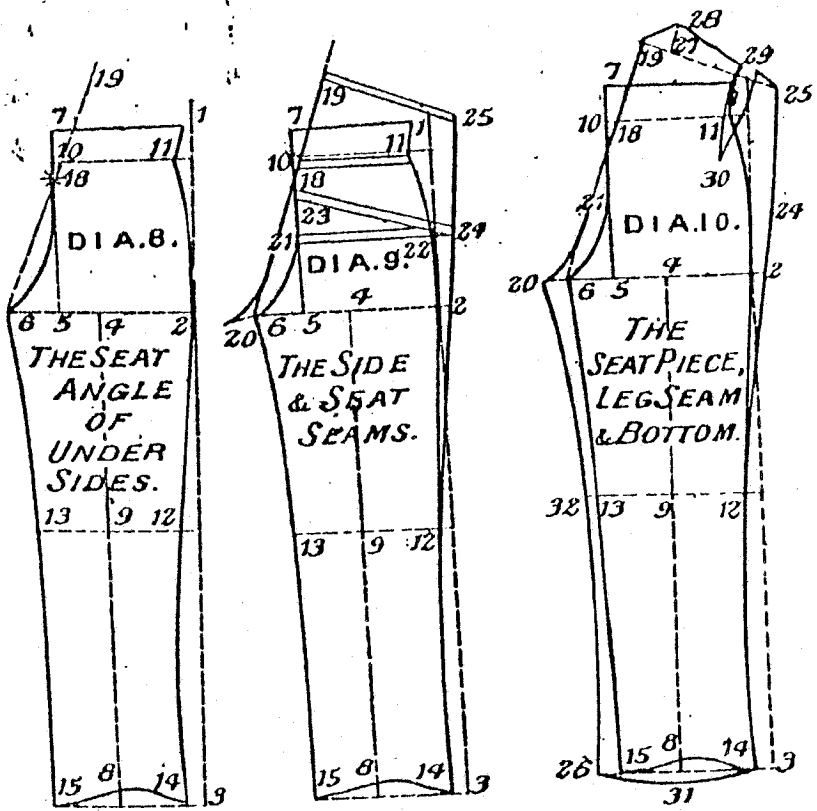
Draw the curve of fork by making 5 to 17 a quarter-inch more than half 5, 6, and slanting the curves at 16, which is one-sixth seat up from 5. Diagram 7.

THE UNDERSIDES.

18 is one-third seat plus 2 inches up from 6. Draw line from 6 through 18.

6 to 20 is 1½ inches always and curve seat line on to it. Diagram 7.

Measure up seats 21 to 22 and 18 to 24 half seat plus 2 inches. Measure up waists 10 to 11 and 19 to 25 to half



waist plus 2½ inches, and so allow for a one-inch fish and seams. If a half-inch fish only is desired, add 2 inches. If no fish, then only add 1 inch.

Draw sideseam from 25 through 24 to 12 and 14. Diagram 9. 13 to 32 is 1 inch and 15 to 26 is 1½ inches.

Draw the leg seam and round the bottom as shown.

Make 12 a pivot and sweep from 1 to 25. Square from the seat seam to 25. Make 10 to 27 2 inches, and 27 to 28 1¼ inches. Shape seat piece as shown. Take out a 1 inch fish about 3 inches from the sideseam slanting backwards, and about 6 inches deep.

Complete as shown on Diagram 0.

It only now remains to take out the dress as shown on the later diagrams.

POINTS TO REMEMBER.

In drafting Trousers we have not only to fit the figure in a standing position, but make provision for the movements of the body.

In doing this the following points must be borne in mind :

The seat expands 2 inches when wearer sits down.

The seat lengthens 4 to 6 inches when the wearer stoops.

The length of leg increases as the figure opens his legs and stands astride.

The system here described is arranged on the centre-line method, it being in my opinion the simplest and most reliable, enabling the cutter to distribute the width of the legs in the most successful manner.

The product of the system is a clean-fitting fork and a comfortable amount of ease in the seat.

If the system is drafted direct on the cloth, take special note if there is a way of the wool, and if so cut off the one length and turn it round, so that both layers of cloth have the pile running the same way.

When there is a pile to the cloth the undersides must not be reversed, in large sizes crutch-pieces are necessary.

This system will be found most economical, enabling larger sizes to be taken out of the cloth without crutch-pieces than can be obtained by most systems.

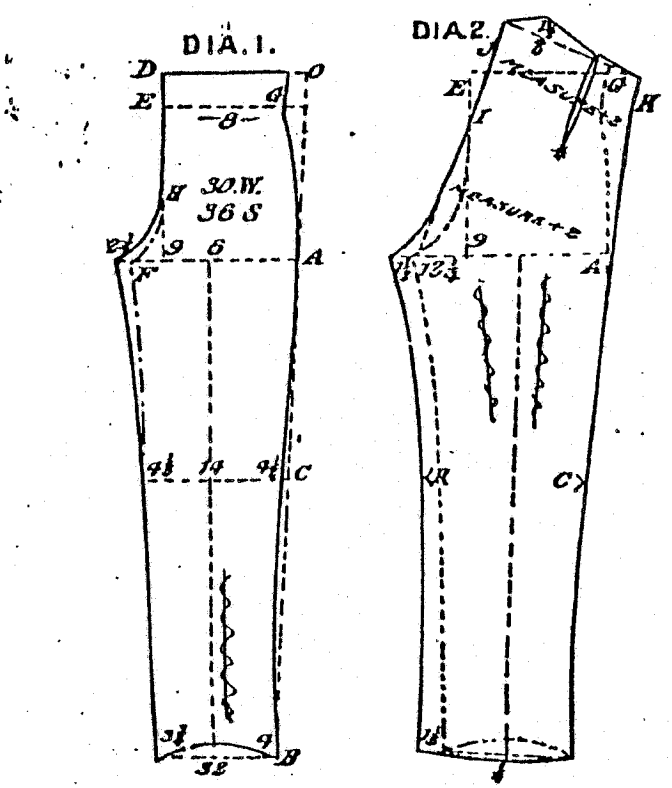
The dress is usually taken out of the right side, but this should be noted when taking the measures.

The right side is the top layer when the top of trousers are at the right hand, the bottom at the left, and the sideseam nearest the cutter.

The dress is taken out of trousers on the opposite side of the leg to that on which the wearer adjusts his person, his shirt, &c.

TROUSERS. Diagrams 1 & 2.

Measures: 44, 32, 30, 36, 18, 17.
O to B side length.
B to A leg length.
A to 6 one sixth-seat.
B to 32 one-fourth bottom.
Draw line 6, 32.
Square lines at right angles to 6, 32 to A, and 12½.



A to 9 one-fourth seat.
A to 12½ one-third seat plus ¼ inch.
E to G one-fourth waist.
6 to 14 half leg less 2 inches.
14 to 4½ one-fourth knee.

32 to 3½ one-fourth bottom less ¼ inch.
12½ to F 1 to 1¼ inches, usually taken out of right side; start about 6 inches up, finish about 3 or 4 inches above knee.

THE UNDERSIDES. DIAGRAM 2.

9 to 1 one-fourth seat.
For more ease in seat, make 9 to 1 one-sixth seat, plus 1 or 2 inches.
Measure up waist to measure, plus 2 inches, and take out ½ inch fish; if 2½ is allowed or more, take out 1 inch fish.
Measure up seat to measure, plus 2 inches.
Come out 1½ inches from point 12½.
Add 1 inch at leg seam at knee.
Add 1½ inches at leg seam at bottom.
Square for seat piece by seat seam.
Come in 2 or 2½ inches, and up 1½ inches.

HINTS ON MAKING.

Shrink hams and shins.
Full on undersides over seat, and both seams at calves.
Full on topsides at thigh.
Bring thigh to within 2 inches of leg-seam.
Carefully avoid twisting by using balance marks.
Pocket mouths about 6 inches.
Top of pocket level with waist,
Buttons not more than 3½ inches apart.
Leave inlays at seat seam, sideseam, and top of leg seam.

TRIMMING.

Pocketings, 13 inches.
Canvas, 3 inches.
Linen, 4 to 6 inches.
Silesia, 9 inches.
Waist lining, 3 inches.
Binding: Waist measure plus 4 inches.
Buttons: F.F., 7 large and five small. W.F., 13 large.
Twist. 1 yard. Silk, 1 hank.
Write on ticket: Length of leg and size of waist, together with particulars of pockets and general finish.
Time allowed for making: Time log, 3rd class, 10 hours; 2nd class, 11 hours; 1st class, 12 hours.
West End log, 2nd class, 9 hours; 1st class, 10 hours.

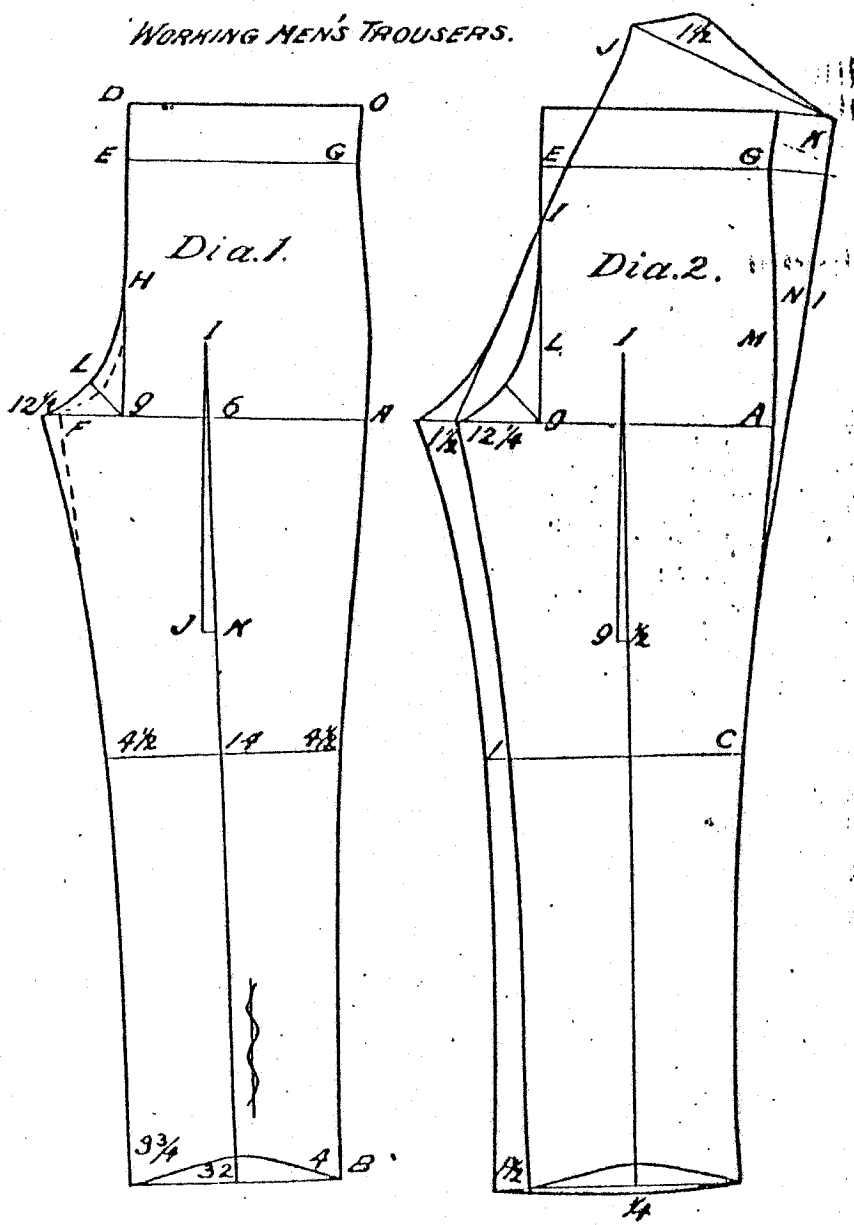
TROUSERS FOR WORKING MEN.

Sample measures 35 waist, 39 seat, 45 side, 32 leg, 19 knee, 18 bottom.
Draw line A 12½. A to 6 one-sixth of seat, 6 to 9, one-twelfth of seat 9 to 12½, ¼ more than 6 to 9.
Square down 9 inches from 6 and go up to I 3 inches, J to K., ¼ to 1 inch for extra stride.
Rule true centre line through from I to 32.
From 6 to 32 leg length.
6 to 14 half leg less 2 inches.
Square on either side and mark one-fourth of knee to 4½ in both cases and one-fourth of bottom from 32 to B.
32 to 3½ one-fourth bottom less ¼ inch.
Shape lower part of leg and hollow bottom as before.
B to O the side measure.
Square up from 9 to D and back to O. Place E at 2½ inches down.
E to G one-fourth of waist and ½ inch.
9 to L half fork plus ¼ inch
12½ to F 1 inch.
Finish fronts as shown.
It will be seen that the side line is optional and that the legs are squared by the opened centre line whilst the body is squared by the fly line.

UNDERSIDES.

Mark round the top sides.
Go out 1½ inches at fork, 1 inch at knee and 1¼ at bottom.
Add ¼ inch of round at ¼.
From 9 to I mark one-third of seat plus 1½ inches which quantity provides ½ inch more seat angle than that needed for the normal or smart trousers, and this in conjunction with the openness at 9, ¼ has the effect of throwing more fulness at fork providing same for sitting and stooping, open legs and give more angle for lined trousers and those made from thick harsh materials such as cord, moleskin, &c.
Measure up waist and allow one inch for four seams. Ditto seat, adding 2½ inches for seams and ease.
Finish as shown.
Linings for workmen's trousers should be cut ¼ inches wider at all points except at falls and bottoms which are usually faced.

WORKING MEN'S TROUSERS.



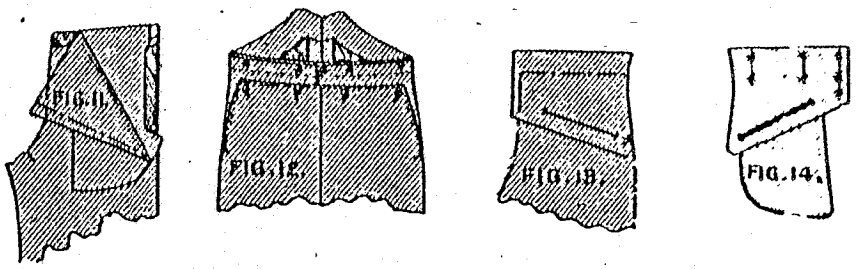
MAKING HINTS IN GENERAL.

First put in the thread marks to show where the inlays have been left, the position of the balance marks, &c. *See* Diagrams 1 and 3.

Fig. 4 shows how the fittings are taken from the usual hollowings. These consist of seat piece at bottom, Fig. 1, catch in the middle, and pocket bearer for cross pockets if required.

Fig. 2 shows the linen and stay tape put before the facing of the pocket mouth if top side is turned over.

Fig. 5 shows the catch sewn on, which should be quite



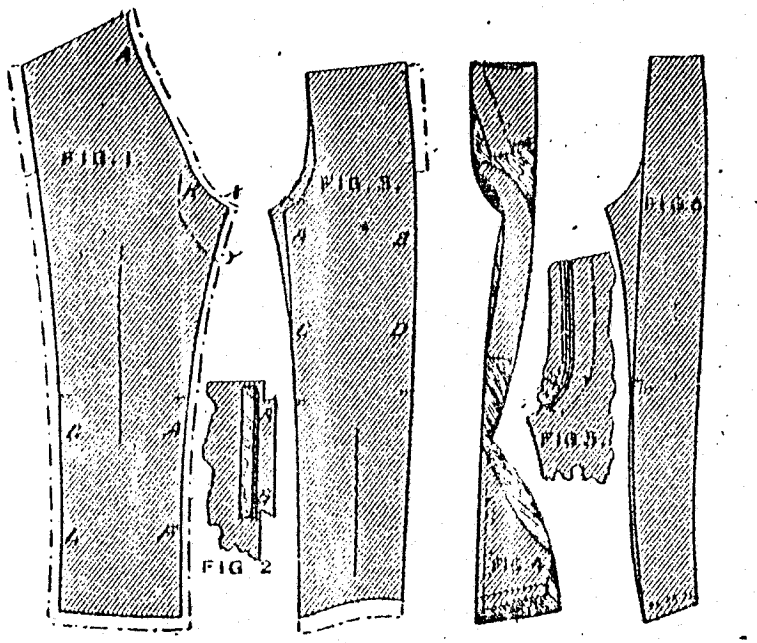
smooth when turned back, as per dot and dash line. This is lined with silesia and interlined with linen.

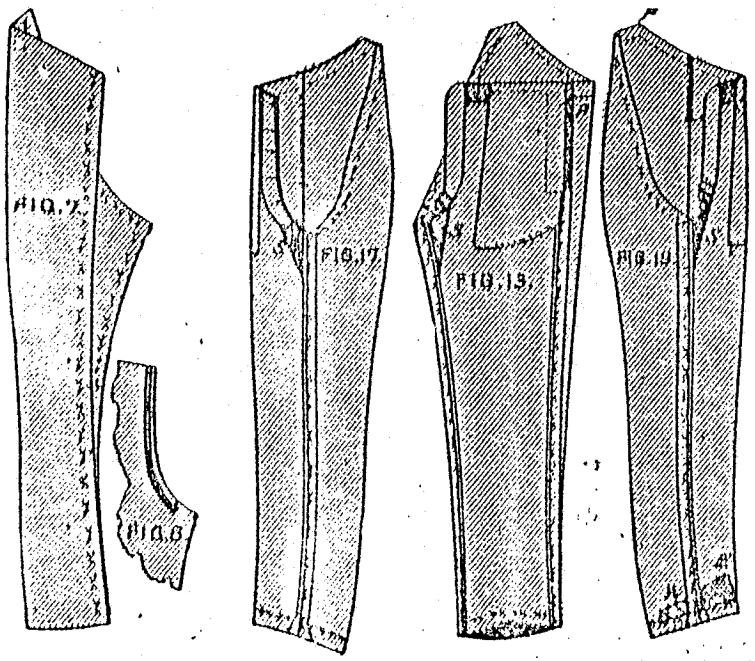
Fig. 6 and 7 show the top and under sides folded over ready for shrinking, the position of the wavy marks on Diagrams 1 and 3 indicating where the shrinking should be done.

Fig. 8 shows stay tape put up the front of fly side to steady it. Fig. 11 shows the pocket ready to fell to the facing. Figs. 12, 13, and 14 illustrate the finish of the whole fall fronts, with the positions of buttons, pockets, &c.

Fig. 17 shows the leg seam sewn, the fly stitched on, the button holes inserted, and the crutch linen in place. The result of the shrinking at thigh and instep is clearly seen in the hollow at these parts. Fig. 18 illustrates the catch on right side. The pocket is finished, the canvas is put round the tops, and the crutch is lined.

Fig. 19 shows the tops stitched and the bottoms faced with canvas if that is thought necessary. It only now remains to turn the bottoms up, to measure, put the buttons on the top, close the seat, tack the fly, put on the waist seams, and press them off.





DETAILS AND FITTINGS.

Diagram 1 shows the fly-fronts. The fly and the catch should be cut by their respective sides. I represents the cutting of the catch, which is cut exactly to correspond with the right topside. It should be about 2 inches wide to come within two inches of the fork. B shows the cutting of the fly, which should be cut by the left topside, and kept ¼ inch from the edge. The tacking at B should be about 2 inches from the fork, and sufficient distance allowed between it and the bottom hole to allow of its being buttoned freely. There should be five holes up the fly, and the top fastening may either be adjusted by button and hole the same as the rest, or the button may be put on the inside of fly and the hole worked in the catch on the hooks and eyes made for this purpose may be used.

SIDE POCKETS.

The pocket mouth should be about 6 inches deep, and start at the hollow of the waist. This is shown on A, Diagram 1, whilst the inside finish is shown on Diagram 1 B.

WHOLE-FALLS. DIAGRAM 2 A.

Cut off the top of foreparts 2 inches at the side and 1¼ at the centre of the front. The bearer is cut as shown on B, Diagram 2. Cut the bearer the same as the topside of trousers, adding on from ¾ to 1 inch at front; make them not less than 7 inches deep at the side, and 5 inches deep at the front.

The dot and dashout line on this diagram shows Bilston Bearers.

CROSS POCKETS.

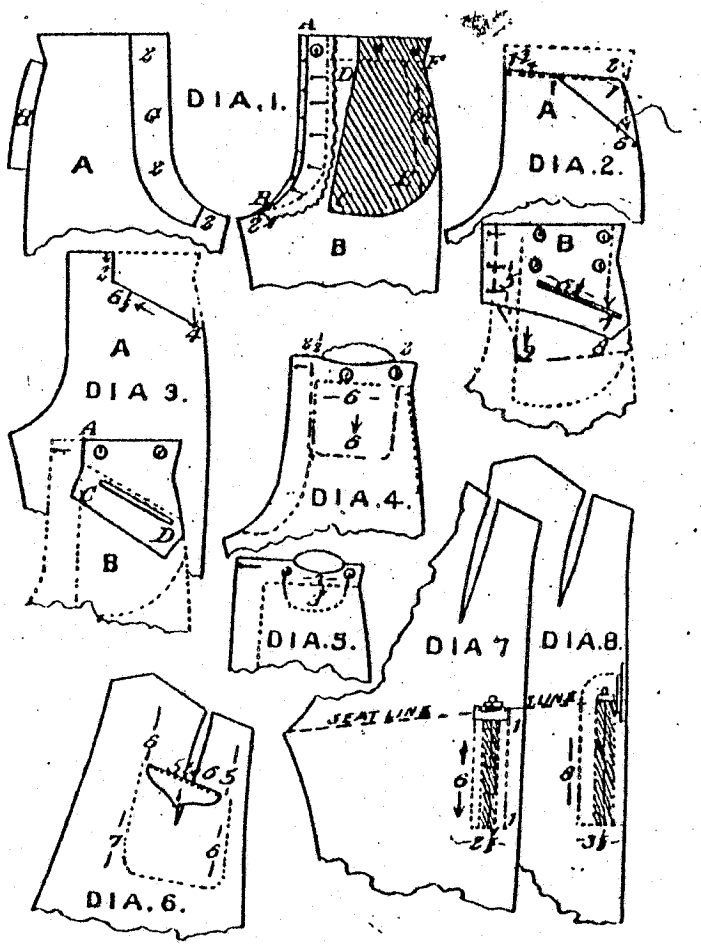
Diagram 3 shows the topside. The pocket mouth is marked about 4 inches down at the side and 2 inches down at the front; it ought not to be less than 6 or 6¼ inches across. The cross pocket is best put in with a bearer, the cutting of which is illustrated by B, the bearer being cut deep enough to allow it to form a facing as at C, D.

CASH POCKET. DIAGRAM 4.

Cash pockets are generally put in across the top. They are made from 5 to 6 inches wide, and about 6 inches deep.

WATCH POCKETS. Diagram 5.

These are usually put in between the two top buttons, and are made about 3 or 3½ inches wide, and about the same depth.



HIP POCKETS. Diagram 6.

These are put in in various ways, jeated, welted, and with flaps. They should be placed from 4 to 5 inches down from the top in the front, and 5 to six inches down from the top

at the back, and should be from 5 to 6 inches wide and about 6 to 7 inchss deep. They should not be allowed to come too low, or they would prove uncomfortable when the wearer was seated.

RULE POCKETS.

These are either put in with a welt or in the seam. Diagram 7 shows the welt method. This should be put in the underside about 1 inch from the sideseam, made about 6 or 6½ inches deep, and not less than 2½ wide.

Diagram 8 shows them put in the seam, when the dimensions should be about 8 inches long and 3 or 3½ inches wide.

DISPROPORTIONATE TROUSERS.

Ideal of proportion—waist 6 inches smaller than seat.

Points to notice:

Corpulent figures are shorter in the leg than normal; they generally stand with legs open or wider apart than proportionate.

Thigh is small in relation to seat compared to normal.

Corpulent figures are generally erect.

The increased size of waist takes place principally at front; this demands more length at top of fly.

THE TOPSIDE. Diagram 1.

1 to 4¼ length of side.

4¼ to O length of leg.

O to 8 one-sixth of seat.

4¼ to E one-fourth bottom.

Draw line E 8, and continue it up to A, one-twelfth seat.

8 to C is 9 inches.

C to B ½ inch, or more according to the amount it is desired to open the legs.

Square line 8 to 16 at right angles to A B.

O to 12 one-fourth seat.

O to 16 one-third seat.

11½ to 13 one-fourth waist plus ½ inch.

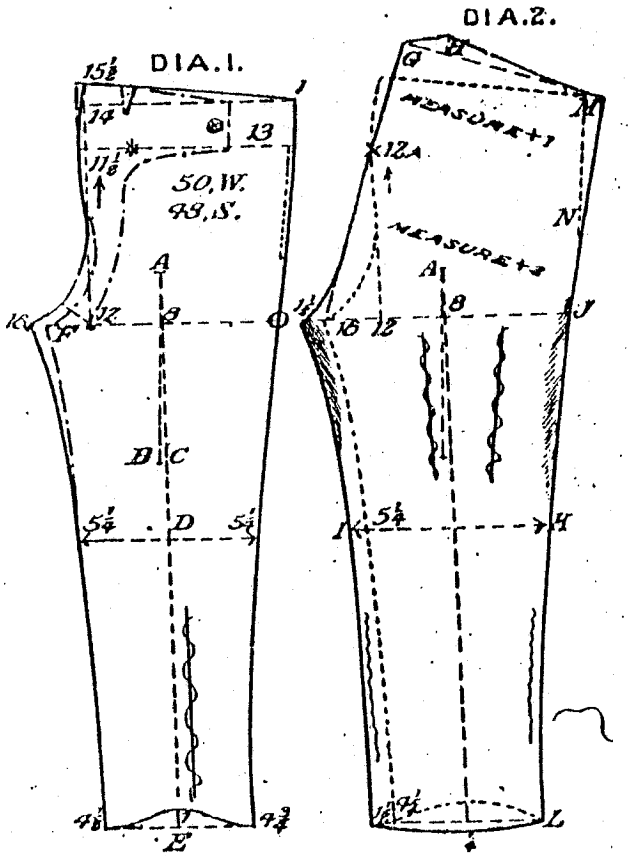
From 14 to 15 is one-sixth of disproportion.

Find disproportion as follows.

Proportion is waist 6 inches smaller than seat, thus, seat 48, waist 42; the actual waist being 50, shows 8 inches of disproportion.

Either recede top of fly half of this quantity, or, better still, take out V as per dot and dash line.

D to 5¼ one-fourth knee.
E to 42 one-fourth bottom less ¼ inch.
Hollow topsides at 1.



Take out 1 inch dress at F.
Complete as diagram.

THE UNDERSIDE DIAGRAM.

Take cut-out topsides.
Add on 1½ inches at 16 for fork.
Add on 1 inch at knee, 5¼.

Add on 1½ inches at bottom, so that the combined size of top and underside equal size desired, plus 1 inch.
12 to 12 A one-third of seat plus 3 inches.
Draw seat-seam from 16 through 12 A.
Make up waist to measure plus 1 inch at M.
Make up seat to measure plus 2 inches at N.
Square by seat-seam from C to M.
Make G to H 2 inches.
Add on 1½ at H. Complete as diagram.

HINTS ON MAKING.

Work up topsides so that receptacle for stomach is at •
Keep undersides on tight at both side and leg-seams a thigh.
Full on undersides at both side and leg-seams over the calf, and press fullness at back.
Pockets should be made to point well towards the front.
Buttons should not be more than 3½ inches apart. If necessary, put on a third button at front.
Corpulent trousers are improved by a French bearer, as per dot and dash line.
Bring fly to within 2 inches of fork.
Make up leg length as much longer than measure as the legs have been opened.

FRENCH BEARERS. DIAGRAM 27.

Button catch wide enough at top to extend to side about 2 or 2½ wide, where a tab with holes is arranged.
They are very useful for corpulent figures.

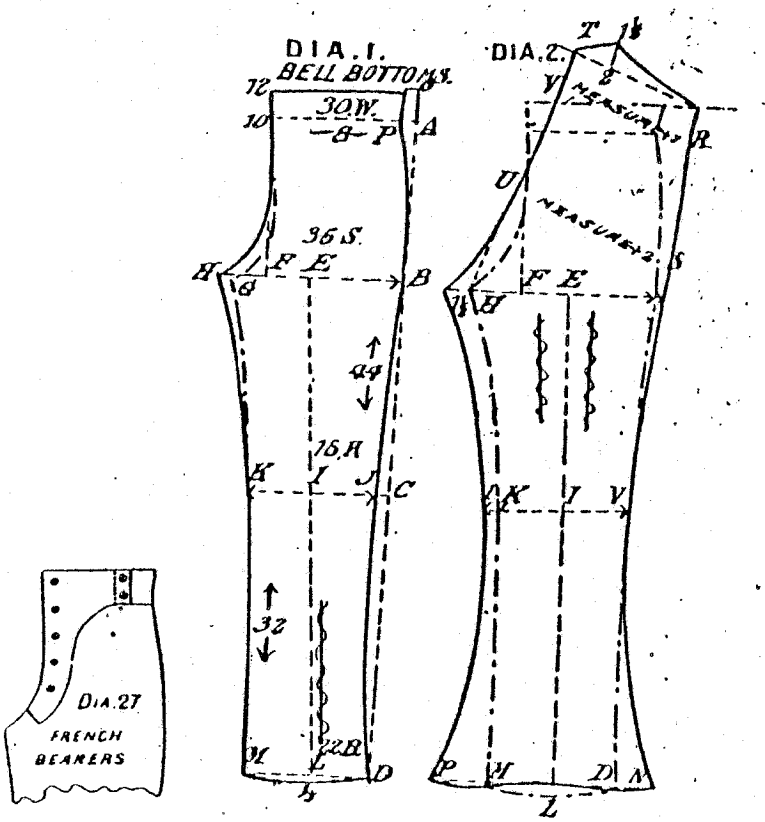
BELL-BOTTOM TROUSERS.

Special features: Close-fitting at knee, very wide at bottom. The extra size at the bottom necessitates their being longer in the leg than ordinary style.
Measures to which diagrams are drawn: 44, 32, 30, 36, 16, 22.

THE SYSTEM. DIAGRAM 1.

O to D side length.
D to B leg length.
B to C half-leg length less 2 inches.
B to 5 one-sixth seat.

D to L one-fourth knee.
Draw line E L.
Square fork line at right angles to line E L.
B to E one-fourth seat.
B to H one-third seat plus ¼ inch.



I to J and I to K one-fourth seat.
L to M one-fourth knee.
14 to P one-fourth waist plus ¼ inch.
Complete as diagram.
Take out dress from right side, H to G, 1 inch.
Round topsides ½ inch at L.

THE UNDERSIDES. DIAGRAM 2.

Mark out 1½ inch from H and 1 inch from K.
L to N half size of bottom less L D.
L to P half size of bottom plus 1 inch less L M.
F to V one-fourth seat less 1 inch.
Square by seat-seam for seat-piece.
Come in 2 and up 1½.
Make up waist to measure plus 1 inch.
Make up seat to measure plus 2 inches.
Complete as shown.

HINTS ON MAKING.

If the knees are very tight-fitting it may be well to full topside on over the knee.

The bottoms are often faced to keep them firm for 4 to 6 inches up from the bottom.

Special care must be taken to avoid twisting.

Put balance marks in at both side and leg, and see they are kept together.

If cross pockets are required, it is best to put in a bearer at top.

The class of customer who order this style are very particular about fit; they like a close-fitting fork and smart hanging bottom, consequently the bottom should be carefully shrunk.

If they are made of cord, or extra room is desired at the seat, allow an extra ½ inch to the width.

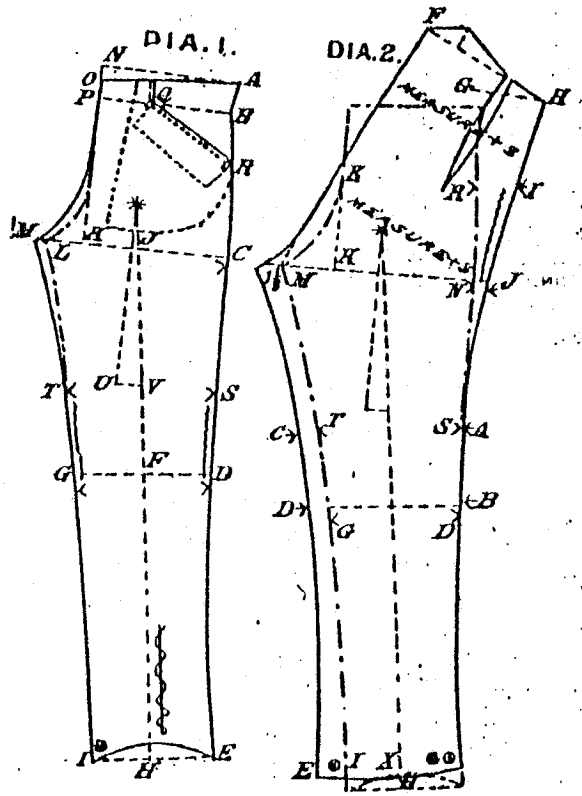
RIDING TROUSERS. DIAGRAMS 1 AND 2.

Leading features: Increased stride to provide for position on horse; more angle to seat to give sufficient length for bending and sitting positions; leg-seam made up longer than measure; strap buttons usually put on at bottom.

DIAGRAM 1.

A to E side length plus 1 inch.
C to E leg length plus 1 inch.
E to H one-fourth bottom.
C to J one-sixth seat.
J to * one-twelfth seat.
J to V 0 inches always.
V to U 1 to 1½ inches.

Draw line U to *.
Square lines M C at right angles to * U.



C to K one-fourth seat.
C to M one-third seat plus ¼ inch.
Square K N at right angles to K C.
Square N A by K N.
Lower N to O one inch.
P to B one-fourth waist.
F to G and F to D one-fourth of the knee.
H to I one-fourth of the bottom minus ¼ inch.
Square bottom from E to H I by centre line.
The leg will then measure the leg length plus 1 inch, and whatever the legs have been opened.

DIAGRAM 2.

Take topsides; make a fold at knee so as to take up the extra inch allowed for fulling on over knee.
Mark out from M 1½ inch.
K to E one-sixth seat.
Draw seat-seam from M through E.
Add on 1 inch at knee, G to D.
Add on 1½ from I to E, so that the combined size of top and underside at bottom equals bottom measure plus 1 inch.
Mark up from top of sideseam to G 1 inch, and sweep out to H, using S as a pivot.
Make up waist to measure plus 2 to 2½ inches.
Take out fish 1 inch wide
Make up seat to measure plus 2 to 2½ inches.
Complete as shown, coming in from F 2 inches, and 1½ to find top of seat piece.

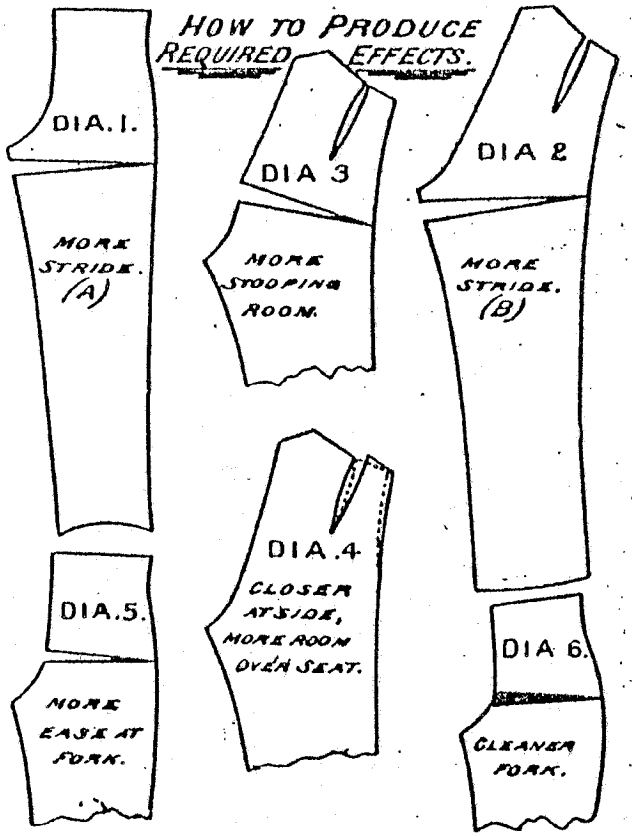
HINTS ON MAKING.

Full on topsides 1 inch at knee, making T G go into C D, and S D into A B.
Full on underside at seat, making I J go into R N.
For cross pockets make A R about 3½ or 4 inches; B to Q about 5½ inches. Cut bearer as per dotted line.
Let pocket slope well towards front.
Find position of strap buttons by marking in from centre line H one inch to X, and so find centre of knee. Locate the first strap button 3½ inches on either side of this, and the next one about 1 inch away.
Bring fly to within 2 inches of fork.
Always sew seat and leg-seams (at least to knee) by hand.
Carefully work up knee and form calf.
Well hollow bottom of topside, and, if necessary, insert V in turn-up.
Make up leg to measure, plus whatever the legs have been opened.
This is necessary because when the wearer is astride of the horse, his legs are longer on the inside than when standing.

HOW TO PRODUCE EFFECTS.

The art of cutting does not consist in merely drafting out a pattern to any given system; it consists, rather, in cutting the garment in harmony with the size of the customer, and

his expressed wishes, and in order to give the key to some of the problems this involves, I have illustrated on a few diagrams how to produce certain effects.



MORE STRIDE. Diagrams 1 and 2.

This is often desired by working men, and may easily be produced by cutting the top and undersides across about 1 inch below the top of the leg-seam, and opening them out as illustrated by Diagrams 1 and 2. This has the effect of opening the legs, and in making up, the length of the leg should be made up as much longer than the measure as the pattern has been opened. The result of this on the fit will

be to throw surplus material in the region of the fork when the figure is standing upright; but it will give any amount of ease when standing astride.

CLOSE-FITTING TROUSERS.

When very clean-fitting trousers are desired in the region of the fork, this operation may be reversed, opening the pattern out at the side instead of at the leg-seam; this produces very clean-fitting trousers on the inside of the leg, but they are apt to be full at the side, and have very little striding capacity.

CLOSE-FITTING TOPSIDES. Diagram 6.

For a very clean fit at the front, take the topsides and cut them across about 3 inches above the fork level, and let them overlap. This will make them very snug-fitting at the fly-seam, but if it is overdone it is apt to be very uncomfortable, and produce a cutting sensation in wear. This alteration is very useful when the customer complains that his former trousers have had a lot of loose material in the lap.

MORE STOOPING ROOM. Diagram 3.

When more stooping room is required in trousers, it may be given in the manner shown on Diagram 3, and if a little more width is given, it will be an advantage.

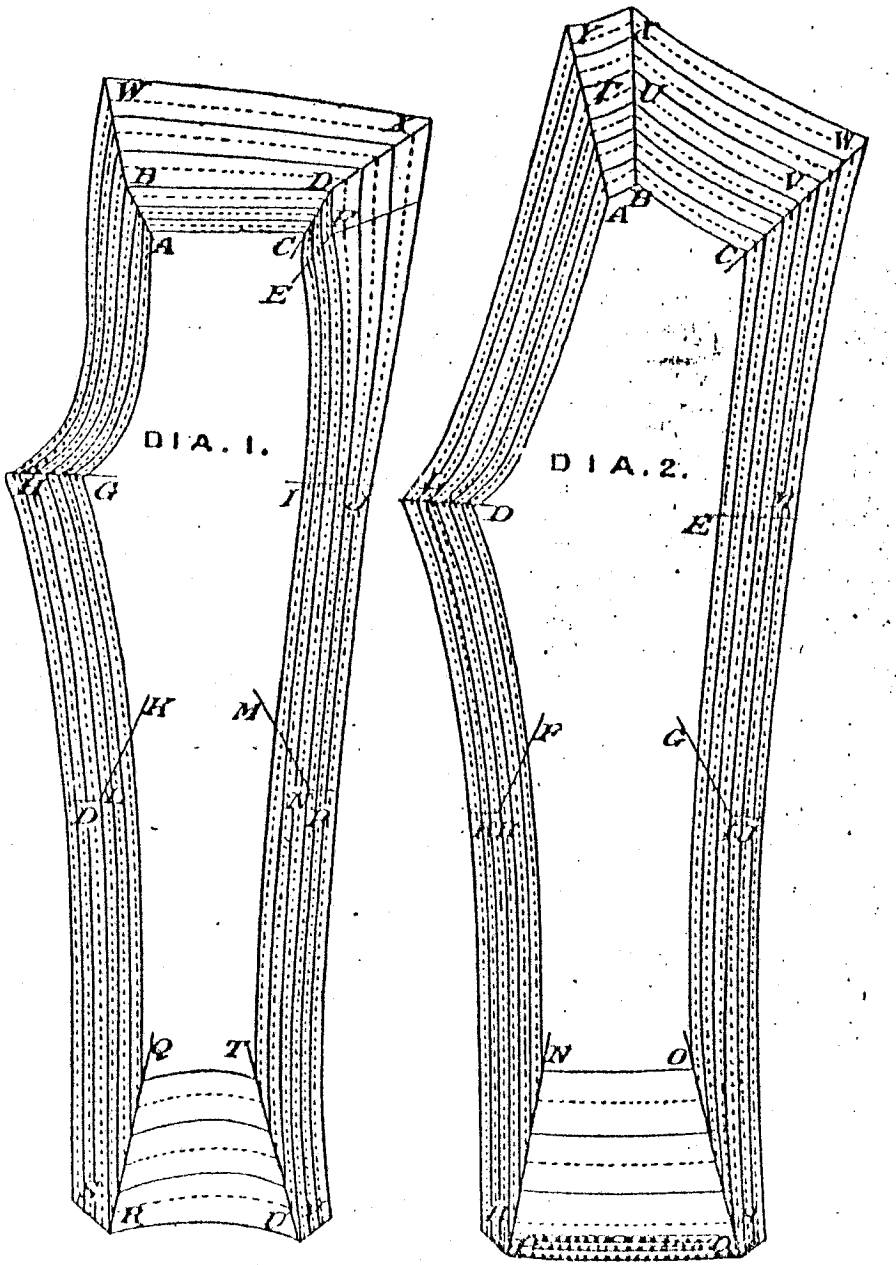
Cut the undersides across about 3 inches above the fork level, and open out at the seat-seam; this will provide extra length, and will add considerably to the ease of the trousers at that part. It will, of course, detract from the cleanness of the fit of the undersides, but when customers want ease rather than fit, this will not matter. It is further to be borne in mind that the undersides at the seat are invariably covered by the coat.

Diagram 4.

More room over seat and closer fit at the side is produced by adding a piece on at the top of sideseam, and reducing the waist to measure by taking out a larger fish. This is the alteration to make for a customer with large seat and flat hips. It is always desirable to get as clean a fit at the side seam as possible, locating any surplus size about 4 inches from the sideseam.

Diagram 5.

More ease at fly-seam and fork of topsides is produced by cutting the topsides across about three inches above the fork



level, and opening them out as shown by Diagram 5. Customers who are ruptured often desire this style of cut, despite the fact that there is a fulness apparent at the fork, and an access of material in the lap.

These alterations will indicate to our readers how to proceed when customers express their wishes in respect to fit.

GRADING TROUSERS.

In many wholesale houses the various sizes of trouser patterns are produced by the grading method, and as this is quite a different principle to the systems described in the preceding pages we give it place at this stage.

The best plan is to take two or three patterns of different sizes, say a 30 seat or 40 seat and a 50 seat, and then draw up the spaces between the various points equally. In some such styles as is shown on Diagrams 1 and 2 which portrays the topside and undersides of trousers. It is better to have three distinct patterns rather than to grade them from either one or two, for although that plan is possible yet it is not so successful as the three pattern method for the reason that above a certain size, say 40 breast the style of figure varies in its proportions considerably from those of the smaller sizes. The following are the instructions: Take the three patterns and form them so that the fork points are all on the same level and the smaller patterns are in the centre of the larger one. Now divide the intervening space into the desired number of parts, for instance, between 30 and 40 seat, 4 extra sizes are wanted, this can be obtained by dividing the space by 5. If 6 extra sizes are wanted divide it by 7 because the top pattern reckons for one. If the patterns are put in the centre it will be found to form the variations at G and I are equal to one of the differences, for instance, the difference between 16 30 and 16 36 size would be 1 inch at G L 1 inch at I.

In dealing with the length of leg it must be borne in mind that above a certain size, say 36 to 40 the leg gets shorter rather than longer, and this has to be borne in mind when locating the knee. This will explain the different angles at which Q R and R S run the same as also seen at K D. Another point to be noted in the large sizes is the increased height of fly seam at the front which is necessary to provide for the largely increased size of waist usually met with in large sizes.

LIVERY BREECHES. DIAGRAM, p. 34.

Special features: Made close-fitting in thigh and seat; buttons brought well to the front at knee; tack placed 1 inch below knee; top button 1 inch below that; three buttons usually show above top of top-boots, though there are usually 5 buttons at least down the sides. Continuations are often, indeed we may say usually, added. The insides of the legs are never strapped. Usually made up fly-front with cross pockets, though occasionally made up with whole fulls. Materials mostly used are drab kerseymere, white buckskin (cloth), and white leather.

Prices charged for these in the city are:
Kerseymere, from 30s. to 42s.
Buckskin in cloth, from 42s. to 52s. 6d.
White Leather, from 57s. 6d. to 84s.

THE MEASURES.

Side to knee. Leg. Fork to knee. Fork to small. Fork to calf. Fork to full length. Waist. Seat. Thigh about three inches below fork. Knee. Small. Calf. Bottom. The last four taken over the bare leg or pants.

THE SYSTEM.

Draw line O 12¼.
O to 6 one-sixth seat.
O to 9 one-fourth seat.
O to 12¼ one-third seat plus ¼ inch.
Square up and down from 6.
6 to 3 one-twelfth seat.
6 to 9 nine inches always.
9 to 1 one inch, which is the amount the legs are opened.
6 to 15 leg length to knee plus 1 inch.
Continue to 17½ and 20½, the lengths to small and calf respectively, plus 1 inch.
O to B the body-rise, formed by deducting fork to knee from side length to knee.
Square up from 9.
9 to 10 one-sixth seat, plus 4 inches.
10 to A one-fourth waist plus ½ in.
Square from 12 to B.
Lower front at 12 1 inch.
Shape fork and side to fork level.

THE KNEE.

Mark out from 15 to H, 17½ to J, and 20½ to L, 2 inches in each case.
15 to G one-fourth knee.
17½ to I one-fourth small.
20½ to K one-fourth calf.
Mark off thigh 1 inch less than half measure taken, and complete topside as illustrated.

THE UNDERSIDE.

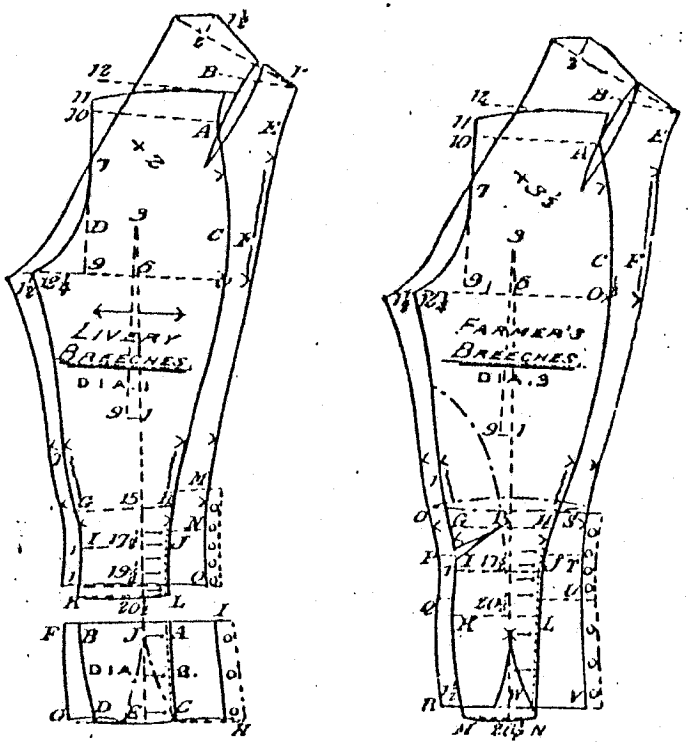
Fold over topsides 1 inch at the knee.
Mark out from 12¼ 1½ inches, and from G I K 1 inch.
Measure up knee, small and calf to measure taken on customer, plus 1 inch to M N L O.
9 to 7 one-sixth seat plus 1 inch.
Draw seat-seam from 12¼ through 7.
Measure up seat to measure plus 2 inches, and thigh to measure plus 1.
Make pivot of O, and sweep from 1 inch above B.
Make up waist to measure plus 2½ inches, and take out 1 inch fish about 3 inches from sideseam.
Square across from seat-seam to P; come in 2 and up 1½.
Complete as diagram.

CONTINUATION. DIAGRAM 2.

Draw line J E.
J to A and E to C 2 inches.
J to B one-fourth calf.
E to D one-fourth bottom.
B to F one inch.
Square down from F to G, and add on a little spring.
Make G to E one-fourth bottom plus 1 inch.
Make A to B and F to I the size of calf plus 1½ inch.
Take out V at E C J the same size both sides of construction line.
Make up size of bottom to measure plus 1½ inches.

HINTS ON MAKING.

Full on underside over seat at F.
And topsides over knee at G and H.
The best way to do this is to put in a drawing-thread between balance marks, and press away the fulness as much as possible before sewing the seams.



Locate the top hole at the small; make up knee to the nett measure and sew on the button with a good shank.

Put a calf button at the back of calf to secure the gaiters or boots.

The continuations should be made up of thinner material of corresponding colour to the tops.

Shrink under the knee, and in other ways make up as for trousers.

FARMERS' RIDING BREECHES. DIAGRAM on p. 34.

Special Features: Moderate amount of fulness in seat and thigh at sideseam; clean fitting on inside leg-seam; knee buttons well forward; insides of knees strapped, sometimes continued to ankle in one piece, at others cut to calf, and continuation added; usually made-up fly-front with cross

pockets, but sometimes finished with split falls and frog pockets.

Materials mostly used: Bliss's tweeds, whipcords, various kinds of cords, &c.

City prices: 20s. to 60s.; strappings 4s. 6d. to 6s. 6d. extra.

West end prices, 50s. to 80s.

The measures are the same as for livery breeches, with the exception of the thigh measure, which may be omitted.

THE SYSTEM. DIAGRAM 3.

Draw line O 12½.
O to 6 one-sixth seat.
O to 9 one-fourth seat.
O to 12½ one-third seat plus ¼ inch.
Square up and down from 6.
6 to 3 one-twelfth seat.
6 to 9 nine inches.
9 to 1 one inch.
Draw line from 3 through 1 to W.
6 to 15 leg length to knee plus 1 inch.
6 to 17½ length to small plus 1 inch.
6 to 20½ leg length to calf plus 1 inch.
6 to 26½ leg length to bottom plus 1 inch.
9 to 12 difference between side and leg measure to knee.
9 to 10 one-sixth seat plus 4 inches.
10 to A one-fourth waist plus ½ inch.
12 to 11 one inch.
15 to G one-fourth knee.
17½ to I one-fourth small.
20½ to K one-fourth calf.
26½ to M one-fourth bottom.
15 to H, 17½ to J, 20½ to L, and 26½ to N each 2 inches, add ½ inch outside O, and shape sideseam as shown.
Complete topsides as shown.

THE UNDERSIDES.

Cut out topsides and fold over the knees 1 inch.
Mark out from 12½ to 1¼ inch.
G to O, I to P, and K to Q one inch.
M to R about 1½ inches.
Take out a V of about 3 inches at W.
Make up the various parts to measure plus 1 inch at S T U, and plus 1½ inch at V.

9 to 7 one-sixth seat plus 1.
Draw seat-seam from 12¼ through 7.
Make O a pivot, and sweep from B to E, which is 1 inch above topside.
Make up seat to measure plus 2½, and take out fish of 1 inch.
Make up seat to measure plus 3½.
Square across from seat-seam to E.
Add 1½ inches at 2 inches from seat-seam at top.
Complete as per diagram.
Take out V on the inside of the leg-seam of topside just below knee, as shown, and take out a fish from the underside at knee, as illustrated by dot and dash lines of from 1½ to 2 inches.

HINTS ON MAKING.

Carefully distribute the fulness over the knee and seat. If strapping is put on the inside of the leg, cut the seams off and stoat the seam up and so make it thinner.

Put the strapping on so as to take as much of the wear on the inside of the leg as possible. Make up the knees to measure, and if finished with buttons, sew them on with a good shank; if with laces, put a narrow strip of whalebone down the edge and work the eyelet holes on either side, putting a facing on the back part.

Cover the seams of the fishes with galon. Put the first button at the small; below the calf the buttons should be flatter and smaller.

GENTLEMEN'S RIDING BREECHES.

Measures: Length of leg to knee, small, calf, and full length, length of side to knee or any other point that will enable the cutter to get the body-rise; size of waist, seat, knee, small, calf, and bottom.

SPECIAL FEATURES.

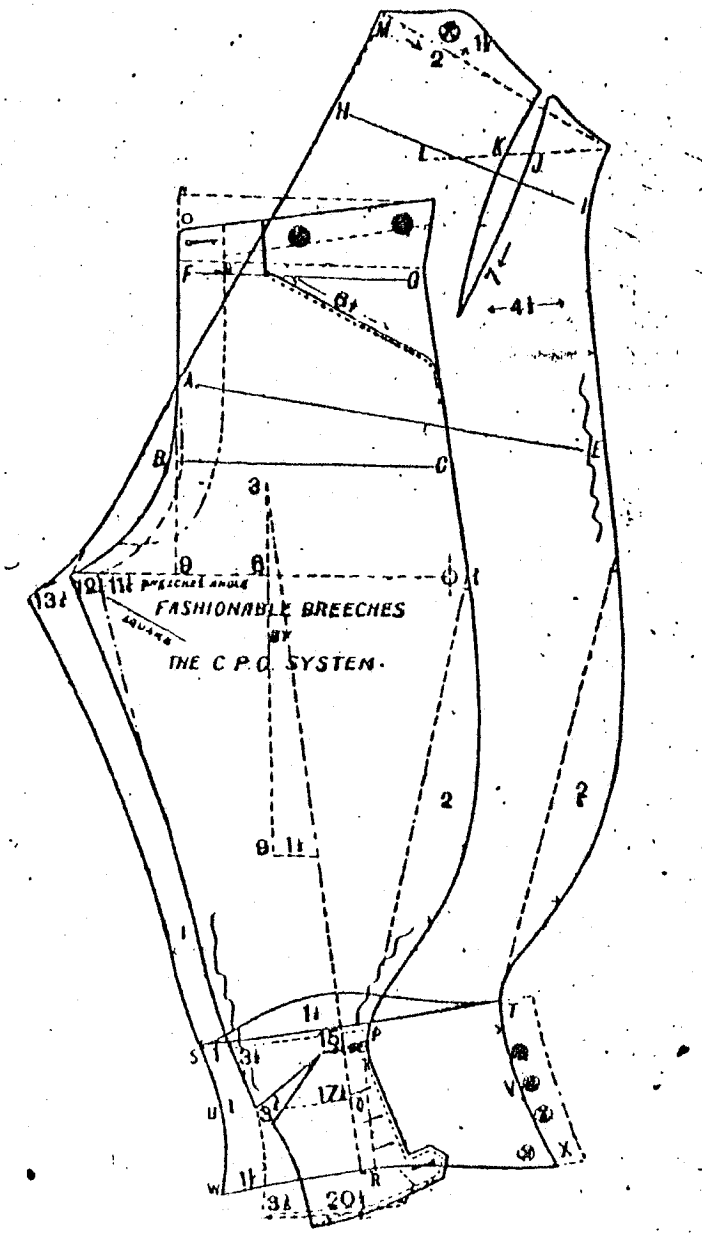
Clean fitting on the inside of the leg, very baggy on the outside of the leg. Easy fitting in the seat and thigh, quite tight-fitting at the knee and downwards. Fronts either fly-front or split-falls. Buttons very forward at the knee. Inside of the legs generally strapped. First button 2 inches below knee. Tack at knee 1 inch below knee.

THE SYSTEM.

Draw fork line O 12¼. O to 6 one-sixth seat.
O to 9 one-fourth seat. O to 12¼ one-third seat plus ¼ inch.
Square down from 6 and up from 9.
9 to N the difference between side length to knee and leg length to knee.
F is the naiural waist line, usually found at one-sixth seat plus 4 inches up from 9.
F to G one-fourth waist. 6 to 3 one-twelfth seat.
6 to 9 nine inches always. 9 to 1¼ one and a half inches.
Draw a line from 3 through 1¼ to the length of leg required.
6 to 15 leg length to knee plus 1 inch.
6 to 17½ leg length to small plus 1 inch.
6 to 20 is leg length to calf or full length plus 1 inch.
Square lines across on either side of these points.
15 to 3¼ one-fourth of the knee.
17½ to 3 one-fourth of the small. 20¼ to 3¼ one-fourth calf.
15 to P, 17½ to Q, and 20¼ to R, 1 inch.
Mark back from O about ¼ inch.
Draw line from ¾ to P, and add 1½ to 2 inches of round.
Connect 12¼ and 3½, as shown.
Provide little round at the knee, and complete the topside as illustrated.

THE UNDERSIDE.

Fold the topside over 1 inch at the knee, and then use it for drafting the undersides.
12½ to 13¾ is 1½ inch.
3½ to S, 3 to V are 1 inch.
3¼ to W 1½ inch.
Measure up the knee from P to 3½, and S to T to measure plus 1 inch for seams.
Treat the small and calf in like manner, and so get T V X.
9 to A is one-sixth seat, and draw seat line from 12¼ through A.
B to C and A to E are half seat plus 3 to 5, or even 7 inches.
Measure up the waist from F to G and H to I, the half-waist measure, plus 2½ inches.
Draw sideseam by giving the same outline between E and T as is given to the topside.
L is 1 inch above the topside.
Find seat-piece by squaring across from M by the seat-seam.



M to 2 is 2 inches, from which point mark up 1½ inches.

Take out a 1-inch fish at K J, placing it about 4½ inches from the sideseam, and making it about 7 inches deep.

Take out a fish under the knee of from 1 to 2 inches.

Cut the topside across from 3 in the direction of 15, and open it out ½, and overlap a V at P. Give a little round to either side of V, and as this will be covered by the strapping, it will be quite safe to stoat it up.

Lower the front 1 inch at N O and complete as shown.

HINTS ON MAKING.

The fish under the knee is seamed and taped.

The extra length of the topside is fulled on over the knee; this may be easily done by drawing in with a thread the required amount and pressing it back. The same process is followed at the undersides at E.

The top hole is placed at the small, and the tack 1 inch above.

The buttons should be put on with a good neck, whilst the bottom button at X should be a flat one.

VARIATIONS IN STYLE.

There are some cutters who prefer to make the undersides very much straighter than as here shown, but they add the quantity they take off the underside and the topside making it very much rounder. The effect of this is that of only firm sewing of the seams as adjusted there will be a much greater length of undersides for the sewing of a straight to a round part as equivalent to frilling on the straight part.

We give a Diagram showing how this style may be cut

THE SYSTEM.

Draw line O D.

O to B the side length to knee.

O to C the side length to the small.

O to D the side length to the bottom.

D to A the leg length.

A to E one-sixth of the seat.

A to F one-fourth of the seat.

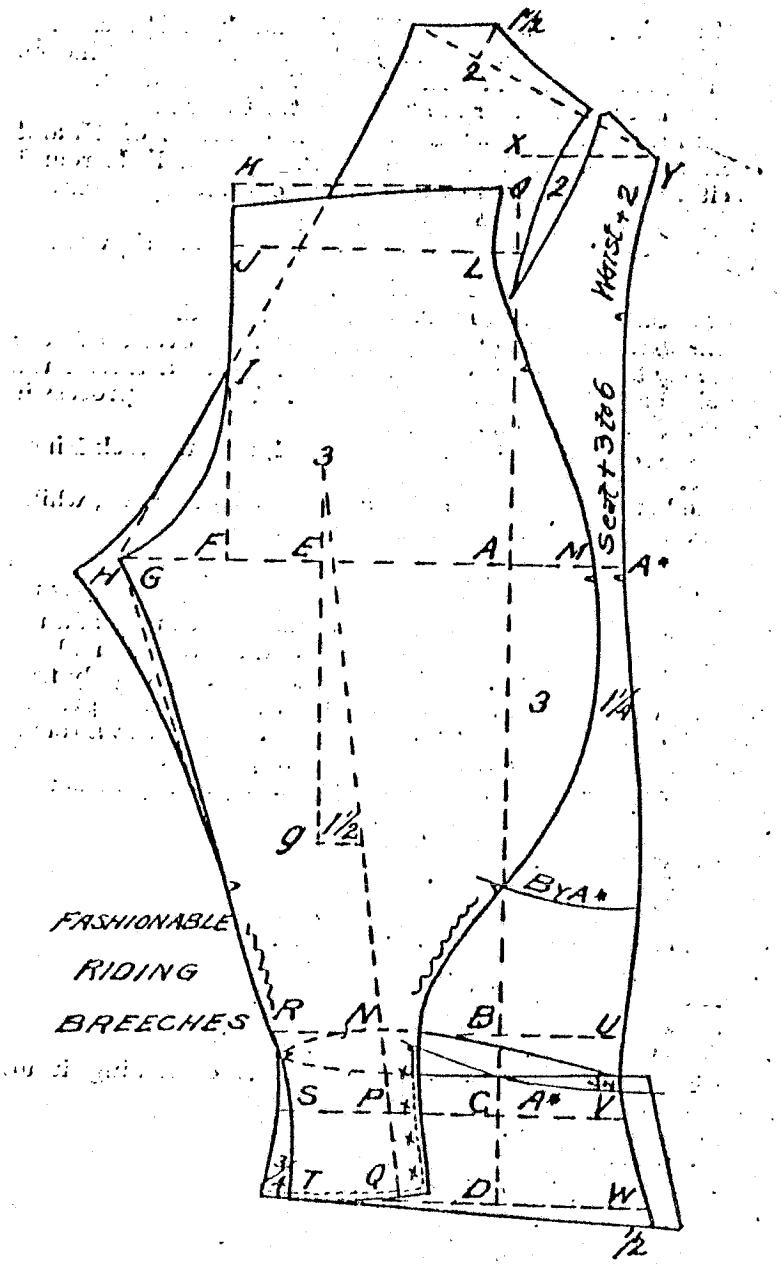
A to G one-third seat plus ¼ inch.

Square up from F and down from E continuing it up to 3 inches.

E to 9 is 9 inches.

9 to 12 is 12 inches.

Draw centre line from 3 through 1½.



N to R one-fourth knee.
P o S one-fourth small.
Q to T one-fourth calf.
Draw leg seam G R S T.
Find the sideseam at 1 inch to the side of N P Q.
Add 3 inches of round beyond line O D and complete sideseam as shown.
J to L is one-fourth of the waist plus ½ inch.
Lower front ½ inch at K.

THE UNDERSIDE.

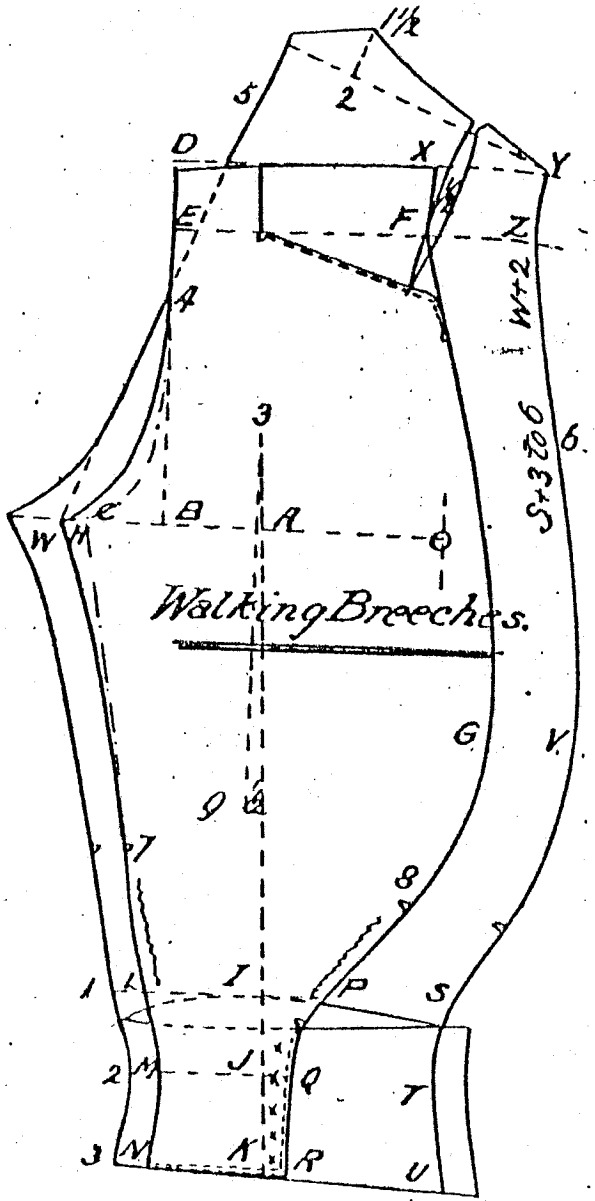
G to H 1 to 1½ inch.
Come down to R and add a little spring at T say ¾ inch.
F to I one-sixth of the seat, draw seat seam from G through I.
Measure up waist to measure plus 2 inches and take out a ½ inch fish at Z.
Measure up seat to measure plus 3 to 6 inches according to the fulness desired.
Make up the knee, small to calf to the measures taken plus 1 inch.
Take out a fish under the knee of from 1 to 1½ inches which will shorten the undersides and provide the extra length of topsides to be fulled on. Allow 1 inch of extra length for fulling on over the seat as from O to X which is to be put in between the marks as per sketch.
Complete as per Diagram.

WALKING BREECHES.

Walking breeches, meaning strictly those which are not required for horseback riding are cut closer in legs and seat doing away with much of the fulness about the inside leg and under ball of seat. The following diagram shows how this smart fitting result is obtained.

THE TOPSIDES.

Draw line to O W.
O to A one-sixth of seat, A to B half that quantity, B to H ¼ inch more than half A B.
Go up 3 inches at A and down 9 inches.
Open legs ½ and rule centre line through.
Mark off the lengths to knee, small and calf, plus 1 inch from A to I and J K.
Square lines across.



I to L, J to M and K to N one-fourth of the respective measures.

Rule up to C from L at 1 inch back from H.

J to Q 1 inch, K to R ¾ inch.

Square up from B to C the body rise completing the whole length of breeches and 1 inch.

Square across the top and mark waist at 2 inches down.

E F one-fourth waist plus ½ inch.

Shape side adding 1½ at O putting most of round at G.

THE BACK PARTS.

B to 4 one-sixth of seat plus 1 inch.

Rule through from H to 5.

Add 1½ at W 1 inch at L M and N.

Measure up waist and allow 2 inches, the seat allowing from 3 to 6 and to each of the knee, small and calf, allowing 1 inch for making up.

Draw sideseam about parallel to front side seam.

Sweep X to Y, and F to Z, making a pivot at S.

Square to Y by 5 H and finish tops and mark fish as before.

It will be seen that there is ½ inch fulness over knee, one inch less seat angle, 1 inch less openness in legs and no fulling over seat than in previous style.

DRESS BREECHES. Diagram 8.

These are made moderately close fitting at fork and thighs, similar to ordinary trousers.

Measures: 30½, 15, 17, 18½, 30, 36, 14, 13, 14.

These are worn by livery servants for full dress, by officials of various kinds, and for unofficial court dress.

They only reach to just below the small of leg.

They are usually finished with a garter and buckle.

0 to 12, body rise.

12 to 6, one-sixth seat.

12 to 9, one-fourth seat.

12 to 12¼, one-third seat plus ¼ inch.

Square up to B and down to 19.

A to 2, one-fourth waist plus 2 seams.

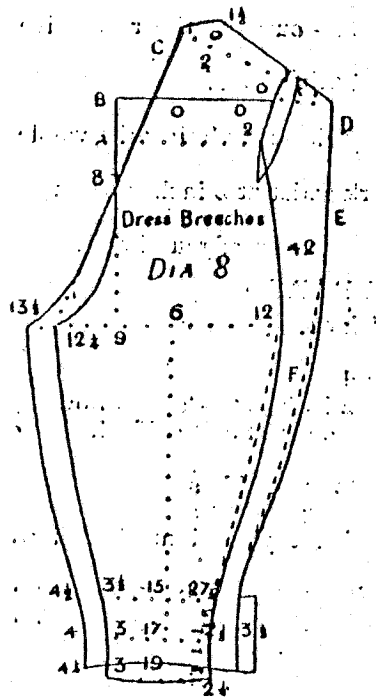
6 to 15, leg length to knee.

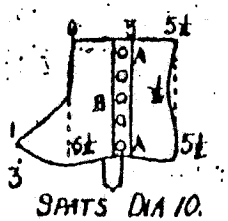
6 to 17, leg length to small, and on to 19, full length, allowing about ½ inch in each case for fulling on.

If to be finished with a garter, cut that much shorter.

15 to 3½, 17 to 3, and 19 to 3 one-fourth knee, small, &c.

15 to 27½, 17 to 2½, and 19 to 2½ ½ inch less than on leg-seam.





UNDERSIDES.

9 to 8, one-fourth seat less 1 inch, Or by Registered Square, placing angle line on fork line.

9 to 13½, one-eighth seat.

3½ to 4½ and 3 to 4, 1 inch for seams.

Make up waist to measure, plus 2½.

Allow 2 inches over seat.

Shape outline at F to taste.

They are made of white buckskin, for state officials; black velvet for unofficials; and plush for livery servants.

In the latter case the pile runs down on topsides and up on undersides.

SPATS. DIAGRAM 10.

This is an excellent reduced model.

Reproduce to figures and outlines given.

They consist of three parts; one, total size as outlined by 0, 1, 5½, 5½.

One piece as outlined by 0, 3, 1, A A.

And the third piece as outlined by B, 5½, ½, 5½.

Straps as shown are put on to go under foot.

Enlarge or reduce at back for different sizes; this will suit an 8 boot. They are usually lined through.

KNICKERS AND KNICKER BREECHES.

Special Features: As close-fitting in fork as trousers, full over seat and thigh, pouched over knee, generally finished at the bottom with a garter or band.

Knicker breeches differ from knickers in the fact that they have the topside cut with the sideseam running forward at the knee, so that there is less fulness to bag over at that part.

The measures are: length of side, length of leg, waist, seat, tight size of leg at small.

DIAGRAM 1.

O to 6 one-sixth of seat.

O to 9 one-fourth of seat.

O to 12½ one-third of seat plus ½ inch.

Square down from 6 and up from 9.

6 to 14 length of leg to knee, or half length of trousers leg, minus 2 inches.

14 to 20 about six inches, that being 2 inches to reach to the small, and 4 inches to bag over.

9 to 12 the difference between the length of leg and the length of side.

10 to 8 quarter of the waist plus ½ inch.

On either side of 14 mark off one-fourth of the size of the knee desired, which is usually about 2 inches more than the half-seat, thus 36 seat, 20 knee.

Add from ½ to 1 inch between O at sideseam and draw side and leg-seam as illustrated, curving off as illustrated at the bottom.

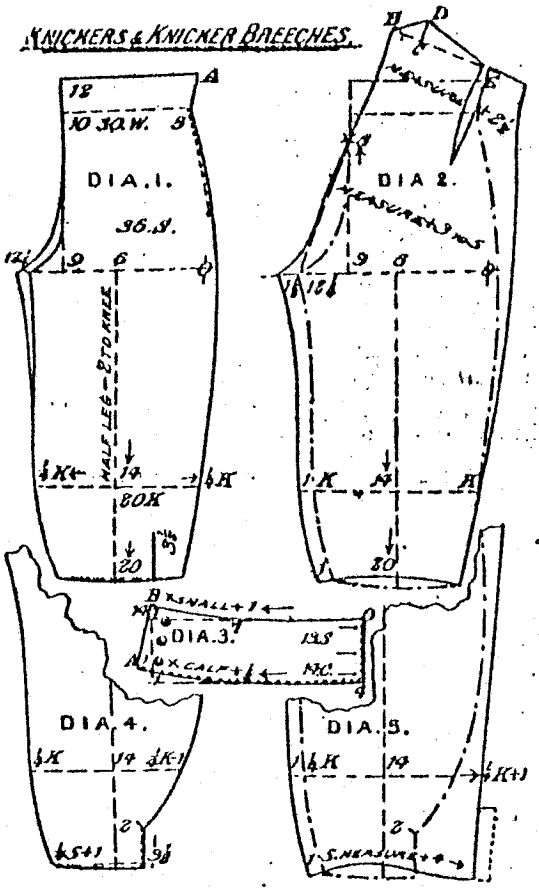
THE UNDERSIDE. DIAGRAM 2.

Mark out from 12½ 1½ inch, from K 1 inch, from the bottom of the leg-seam 1 inch; draw the leg-seam.

From 9 mark up to 8 quarter of the seat less 1 inch.

Draw sideseam from 12½ through 8 to B.

Curve out to point 1½. Make up waist to measure plus 2½ inches.



Take out a fish of 1 inch. Make seat to measure plus from 3 to 5 inches, according to the degree of ease required at that part.

Draw the sideseam by this point down to K. Hollow bottom of the underside at 20. Find the top of the seat-piece as for trousers.

KNEE BANDS. DIAGRAM 3.

The ordinary garters are cut as a straight piece of material about 2 inches wide, sufficiently long to allow of their being fastened with a buckle.

For the deep knee-bands follow Diagram 3.

O to 14 size of small plus 1. Square down from 14 and O 4 inches or thereabouts. Rise at point A 1 inch, and come back about the same quantity. Come up from 4 1 inch to B, and draw the top of the knee-band. Complete as diagram.

KNICKER BREECHES. DIAGRAM 4.

On Diagram 4 we illustrate the newest style of these garments. The top side is curved in sharply directly below the knee to within 2 inches of the centre line. The slit is made 2 inches high, and the bottom of the underside of the leg is made quarter of the small plus 1 inch from the centre line. The underside is made up very much the same as Diagram 2, and in order to illustrate this, we have given Diagram 5. The size of the bottom is made up to the measure of the small of the leg plus about 4 inches, which is either taken out in the form of vees, or is put on in fulness over the knees, and thus provides the bag-over or pouch for that part.

HINTS ON MAKING.

This garment being frequently used for sporting purposes, it is very essential that they should be firmly stitched.

In making up kneebands it is customary to put in a lining of cauvas or linen, so as to provide a firm support for the leg at that part.

Buttons and buttonholes should be made up with great care, the buttons being sewn on with a good shank.

The fronts are usually finished with a fly, and the pockets are generally put in at the side, although occasionally they are inserted in the cross-pocket style.

When vees are taken out over the knees it is desirable that they should be taped on the inside, so as to prevent any unnecessary friction. Care should be taken in making up the knees to measure.

LEGGINGS AND GAITERS.

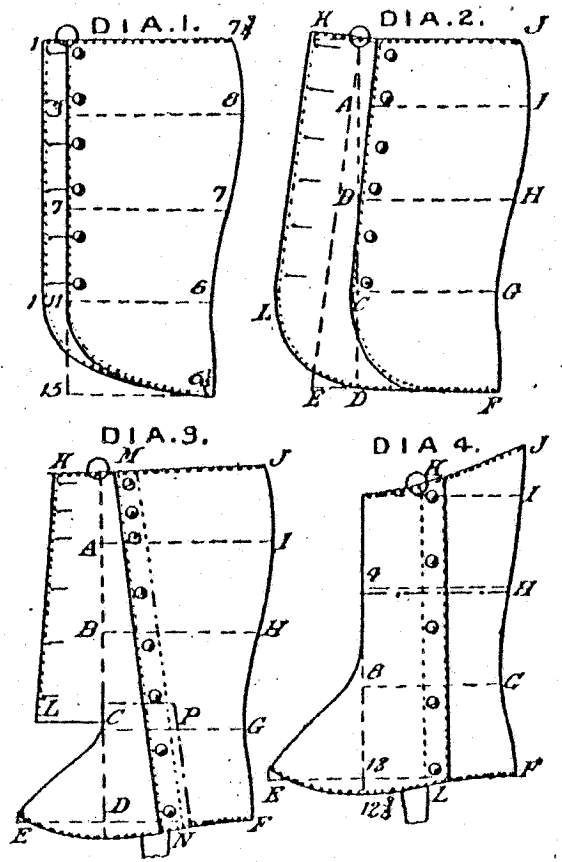
Styles: Various; but all made to fit at the top. The buttons are brought well to the front for the close-fitting style, and moderately so for the loose style.

For livery gaiters they run from the front to the side, and for spats and short gaiters they button straight down the side.

Measures: Length, size of calf, ankle, and bottom.

Diagram 1.

Draw line O 15.
O to 7¾ half calf plus ¼ inch.
O to 3 top to calf.
O to 15 full length plus seams, unless they are to be made up raw edged.
Divide 3 to 15 into three equal parts.
11 to 6 half ankle plus ½ inch.
7 to 7 half the difference between 6 and 8.
Square down from 6, and add ¼ inch of round for heel.
For buttons to come well to front, cut button side as this, and add 1 inch to the button-hole side.

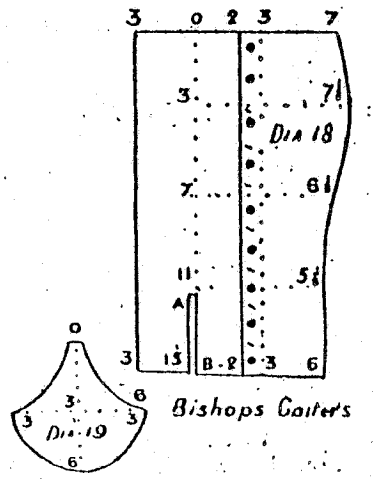


Loose Bottom. Diagram 2.

For the loose style of bottom make the upper part the same.
O to D the length.
O to J half calf plus ¼ inch.
A to I half calf plus ½ inch.
C to G half ankle, plus 1 or 1½ inch.
Square down to F, and add on a trifle of round.
F to E half the bottom plus ½ inch.
From line O E mark back 1 inch for button side, and forward 2 inches for the hole side, and complete as shown.

Livery Gaiters.

Draw line O D.
O to D the length of side.
O to A top to calf.
Divide A to D into three equal parts.
A to I half calf plus ½ inch.
Curve in to J at top.
C to G half ankle plus ½ inch.
Draw line J, I, H, G, F, adding a little round just above F.
F to E half bottom plus ½ inch.



GAITERS OR SPATS. DIAGRAM 4.

Draw line O, 12½.
Make ankle about 3 or 4 inches up from bottom.
O to I half top plus seams.
8 to G half ankle plus seams.
Curve back-seam from J to F.
F to E half bottom.
Shape bottom and front to style illustrated, using care to see that the two sides curve well together.
Mark buttons in the position most desirable, and allow for an overlap of 1 inch.

HINTS ON MAKING.

Leggings and gaiters are often lined; that, however, must be decided according to the material they are made from.

When drab Devon is used, they are merely faced on the edges, and lined for the buttons and holes. Straps are added at the bottom of the gaiters. The edges are generally double-stitched raw. Sometimes the spats are lined, but this is a matter of taste.

BISHOP'S GAITERS. DIAGRAM 18.

Special features: Cut with a whole tongue (Diagram 19) and finished with 9 buttons, running down side.
Measures: 15, 14, 10, 16.
System as for livery, adapted as diagram.
The figures on the diagrams represent inches and will produce a medium size model.
The tongue: 0 joins to A, 6 joins to B, and 3 to 15.
Measures must be adjusted at back seam and length between 3 and 15 as described for coachmen.
Made from Black Kersey or Doeskin.
O mark back to M 2 inches.
Make N midway between D and F.
Draw line, and add on 1 inch for button-stand.
Curve up from E to C.
Make C to L the same as C to P.
Provide for seams at C, P and N.
O to K 2 inches, and complete as shown.
Put 8 buttons up the side, the three top ones being placed in the space allotted to two, thus mark as for 7 at regular distances, and put one between the two top ones.

The Tailor and Cutter Academy

SYSTEMS OF CUTTING.

Vests.

MEASURES necessary: Chest, waist, opening, and full length.

Chest taken round the body close up to the arm-pits. Fig. 1.

Waist round body just above hip bones in hollow of waist. Fig. 2.

Opening from 1 centre of back neck to opening. Fig. 3.

Full length from back neck to bottom of vest.

It is also advantageous to obtain depth of scye, natural waist, across chest, front shoulder and over shoulder.

A fully illustrated description of how to take these direct measurements is given in Part II., but briefly put they are taken as follows:

Depth of scye from nape of neck to level of bottom of scye on back seam.

Across chest, half width from front of left scye to front of right scye.

Front shoulder, from nape of neck to bottom of scye in front.

Over shoulder, from mark on back at depth of scye over the shoulder to bottom of front of scye.

The depth of scye usually equals one-sixth of breast plus 3 inches.

Natural waist one-fourth total height.

The across chest, one-fourth of breast less 1 inch.

The front shoulder, one-fourth breast plus 3½ inches.

The over shoulder, one-third breast, plus 5 inches.

A still better plan is, to select them from scale given in Part II., which has been compiled from the dictates of long experience.

Sample measures: 36, 32, 12, 24½.

Extra measures: 9, 17, 8, 12, 17.

Size round Chest.
FIG. 1.

Size round Waist.
FIG. 2.

Centre of Collar at Back to opening.
FIG. 3.

Centre of Back to full length.
FIG. 4.

THE VEST SYSTEM BY EASY STAGES.

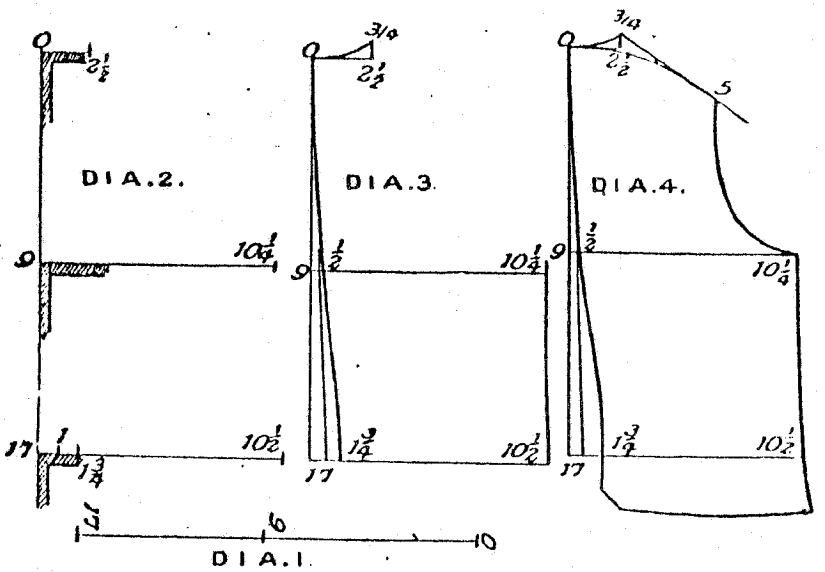
Draw line O 17, and mark off. O to 9 the depth of scye, and O to 17 natural waist. Diagram 1.

Square lines at right angles to O, 9 and 17. O to $2\frac{1}{2}$ one-twelfth breast less $\frac{1}{4}$ inch. 9 to $10\frac{1}{4}$ one-fourth breast plus $1\frac{1}{4}$ inches. 17 to 1, 1 inch. 1 to $1\frac{3}{4}$, $\frac{3}{4}$ inch. $1\frac{3}{4}$ to $10\frac{1}{2}$, one-fourth waist plus $\frac{3}{4}$ inch. Diagram 2.

Connect O to $\frac{3}{4}$, which is $\frac{3}{4}$ inch above $2\frac{1}{2}$.

Draw line O to 17, and draft back seam by hollowing in to $1\frac{3}{4}$. Draw side-seam from $10\frac{1}{4}$ to $10\frac{1}{2}$. Diagram 3.

Sweep from O to 5 by point $\frac{1}{2}$. $\frac{3}{4}$ to 5 one-eighth breast plus $\frac{1}{2}$ inch draft. Back scye from 5 to $10\frac{1}{4}$. Obtain length of sideseam from forepart to complete back as shown.

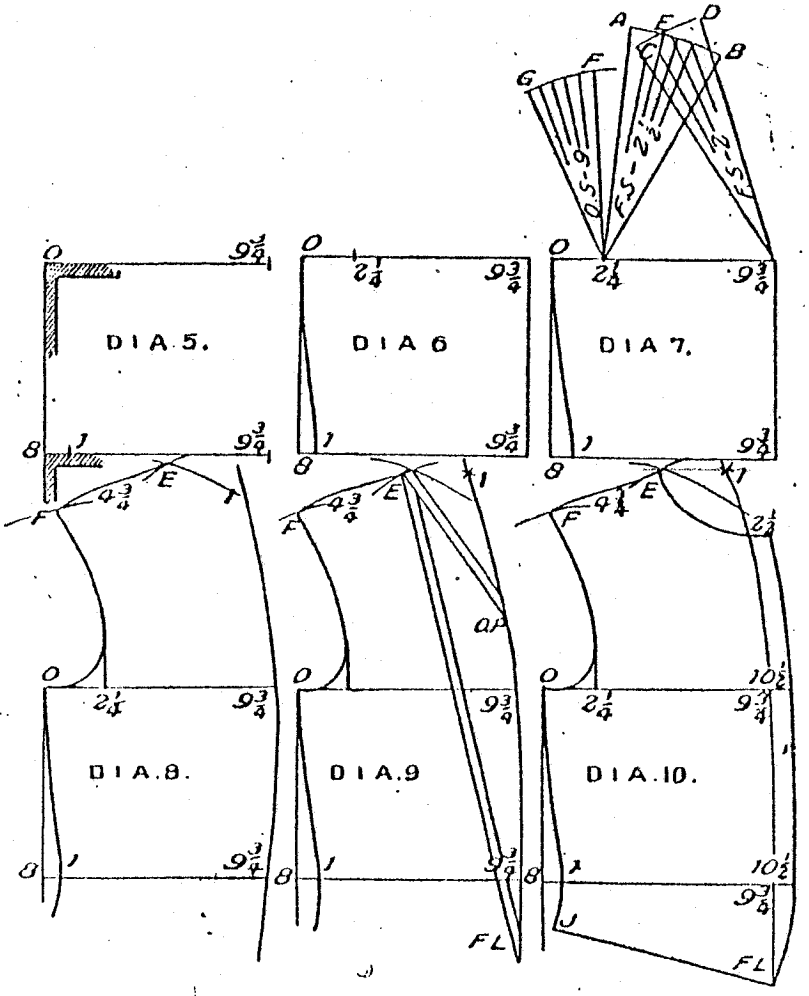


THE FOREPART.

Draw line O 8. Make O 8 agree with 9 to 17 of back. Draw lines at right angles, and make O to $9\frac{3}{4}$ one-fourth breast plus $\frac{3}{4}$. 8 to 1 one inch and 1 to $9\frac{3}{4}$ one-fourth waist plus $\frac{3}{4}$. Diagram 5.

Connect points O to 1 for sideseams, and 9¾ to 9¾ for breast line of front. Diagram 6

Make 2½ a pivot and sweep from A to B by the front shoulder measure less ¼ inch, also less width of back neck. Add ¼ or ⅛ inch and sweep again, using 9¾ as a pivot. here the sweeps cross at E locates neck points.



Use 2½ as a pivot and sweep from F to G by K, a quarter-inch less than the over shoulder measure minus ½ to 5 of the back (Diagram 4). *See* Diagram 7.

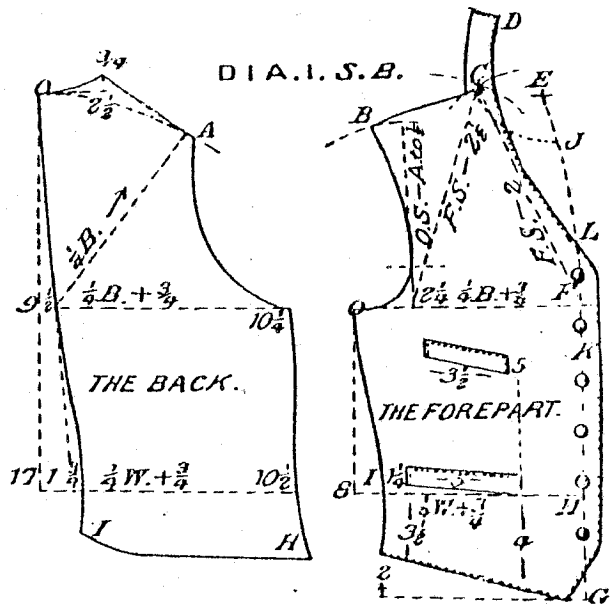
Make E to F a quarter-inch less than the width of back shoulders = 4¼.

Shape scye from F to O. E to I one-twelfth breast less ¼ inch, and draw breast line I to 9¾. Diagram 8.

Measure off the length to opening from E to O P less width of back neck, and measure off full length plus ⅛ inch from E to F L, as indicated by tapes. Diagram 9.

Square run of bottom E F L, with square at J, the long arm of square going from E to bottom of sideseam.

I to 2½ is the same as I to E, and draft gorge. Add on ¾ inch button-stand to complete vest as shown.



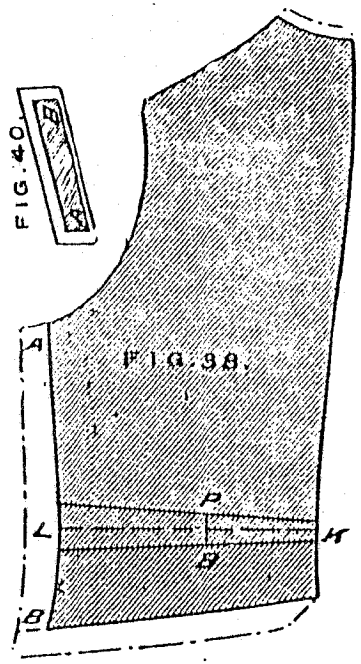
THE SYSTEM. THE BACK.

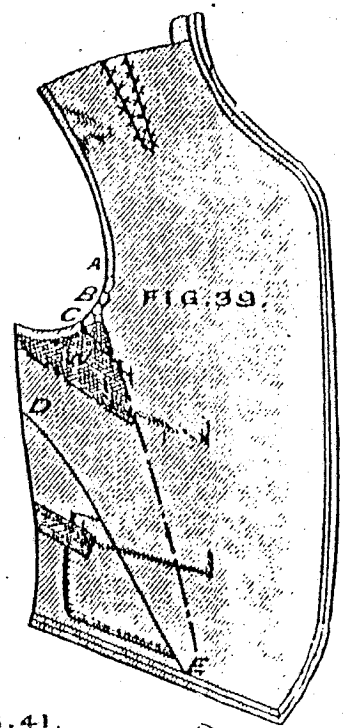
Draw line O 17.
O to 9 the depth of scye.
O to 17 the natural waist.

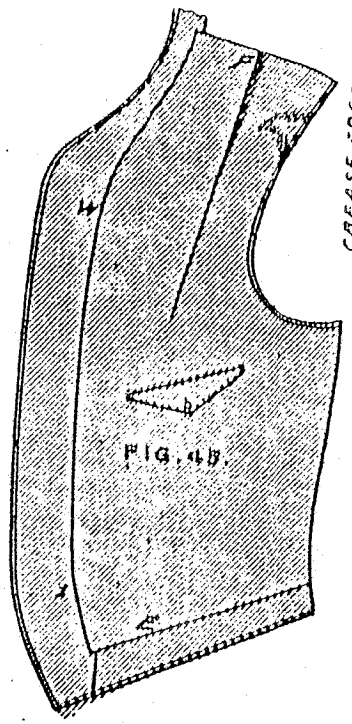
17 to 1 one inch.
Draw line O to 1.
1 to ¾ three-quafters inch.
Shape back by O, ½, ¾.
Draw lines at right angles to 9 and 17.
O to 2½ one-twelfth breast less ½ inch.
2½ to ¾ three-quarters inch.
Make a pivot of ½ and sweep from O to A.
¾ to A one-eighth breast plus ½ inch.
½ to 10½ one-fourth breast plus ¾ inch.
¾ to 10½ one-fourth waist plus ¾ inch.
Shape seams as shown, leaving the length of back to be decided by the forepart.

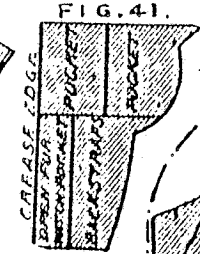
THE FOREPART.

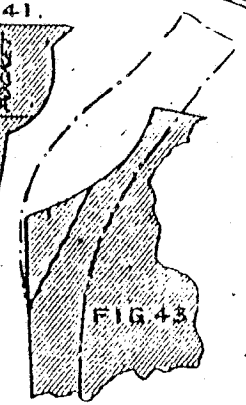
Draw lines O F, O 8.
O to 8 the same distance as from 9 to 17 of the back.
Square line from 8, and mark in to I one inch.
Draw side seam.
O to F one-fourth breast plus ¾ inch.
I to H one-fourth waist plus ¾ inch.
F to 2½ the across chest measure less ½ inch.
From 2½ sweep by the front shoulder measure less ½, less O to ¾ of the back.
Add ½ inch to this quantity, and sweep from F.
Where the two sweeps cross locates neckpoint C.
C to E one-twelfth breast less ½ inch.
E to J the same as C to E.
Draw breast line from E through F and H to G.
Measure off the full length to opening from C to L by the measure taken less O ¾ of the back, but plus ½ inch.
Measure off the full length from C to G by measure taken plus ¾ inch, but minus O to ¾ of the back
Square across from G, and shorten side 2 inches.
Add on ¾ button-stand at K; some leave an extra ½ inch on the button side, but this is optional.
If a no-collar vest is required, add on ½ inch at side of neck and continue round to D the width of the back neck, as shown.
Make 2½ a pivot, and sweep by over-shoulder measure less ¼ A of back, and minus ½ inch.
These deductions are taken from the measure because the vest does not require the same length as the coat.

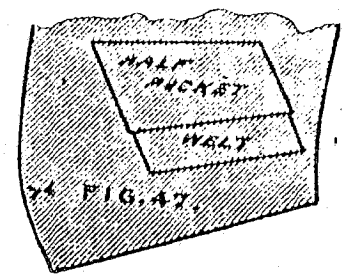












HINTS ON MAKING.

The pockets are usually three in number, two at the side and a watch pocket.

Side pocket put in with welt 5 by ¾ inch.

Watch pocket 3½ by ¾ inch.

Side pockets put in on waist level.

Watch pocket about 5 inches above the top of the side pockets at front, or about 2 inches below line O F. Diagram on p. 48.

In making up the shoulder and neck of forepart must be stretched, the breast worked up a little between L and H, the bottom well drawn in for 3 or 4 inches on either side of G.

A pleat should be put in the lining at shoulder.

The buckle and strap should be put on the back at waist level, and preferably carried into the sideseam. (*See* Fig. 38.) If the hips are large, it is advisable to either put a gusset in the bottom of the back, or to leave a slit at the bottom of sideseam.

After fitting up put in the marking threads for the pockets, and any inlays there may be.

Fig. 40 shows the welt with linen basted through it.

Fig. 41 shows the remains of the Silesia after the back has been cut, and indicates how the pocket's back strap, &c., may be provided for.

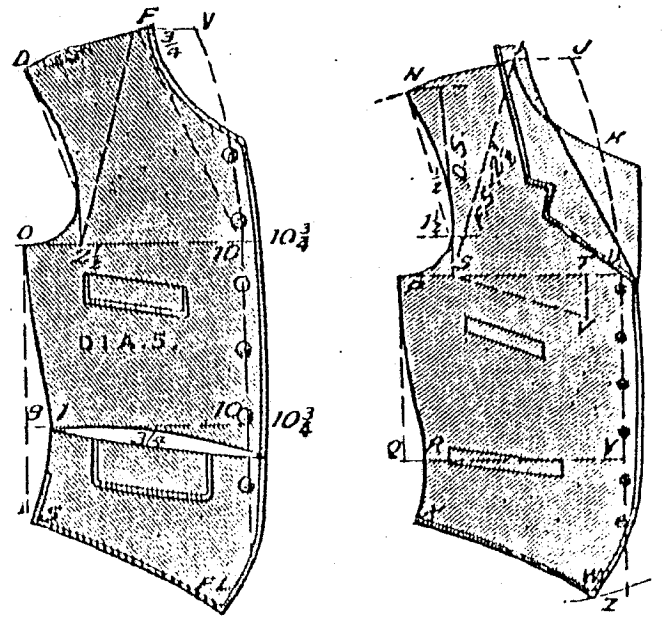
Fig. 47 shows how the welt and the back of the pocket is sewn on. Fig. 43 shows how the facing for collar and lapel is cut in one piece. Fig. 39 illustrates the inside of the vest after the canvas has been put in, the pockets tacked, the stay tape put round the edge, &c. The stay tape should be put on easy at neck, slightly tight down the front and tight round the bottom edge. Fig. 45 shows the forepart with facings on and lining felled in. It will be observed there is a pleat in the lining at F and a breast pocket with flap. This is usually arranged on the left side for cash, &c. Fig. 38 shows the back with back strap in position at natural waist and tacked at P B.

An inlay should always be left at A B, and one at the bottom of back is often useful.

S.B. STEP, SKIRTED AND CORPULENT VESTS.

On the S.B. step diagram we show a more simple method of obtaining the neck point. S to T is always 6 inches and T to V 2 inches. Place a square with the corner on S, while the arm drops to V, then draw line, S.I., equal to the F.S. measure, less 2½ inches. I to J 2½ inches, J to K 3½ inches or to vary with length of opening. Shape gorge from K to J, draw the opening through the length desired from ½ outside I. Make length of turn about 4 inches, of drawing seam K 3½, while the width from break to corner of rever may be 2 to 3 inches.

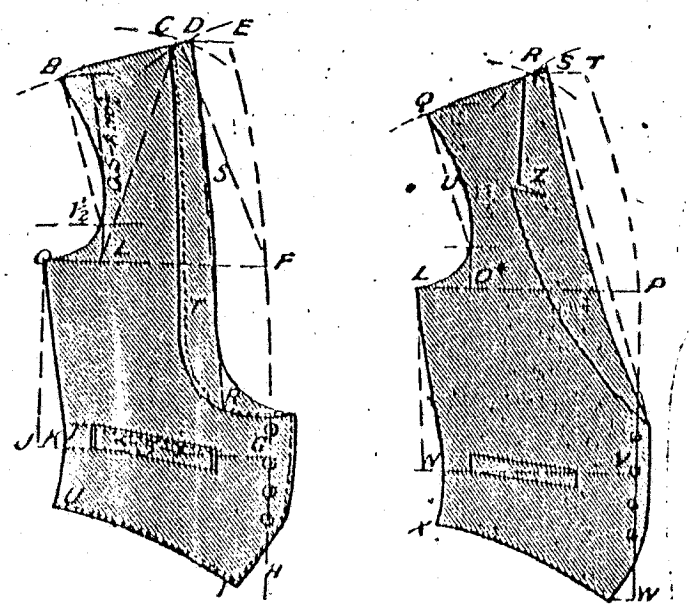
The Skirted Vest is cut similar to the S.B., no collar, but is cut much longer and has a ¾ inch Vee or skirt seam arranged to run 1 inch below waist in front.



THE ROLL COLLAR.

This is cut practically the same as the step collar Diagram, though some cutters lower the gorge to 1 inch above U and fill it up with the collar.

DRESS WAISTCOATS.



The most fashionable dress vest of the present time is cut so as to make up in a Vee shape opening, with pointed collar laid on and rather long bottom points. These features are embodied in the diagram and are easily reproduced therefrom.

The second style of dress vest may be termed the standard shape, which is patronised by those who do not follow the dictates of fashion. The gorge is filled up ¾ inch like the former styles and the opening is shaped 3 inches back from edge, so that it makes up on the horseshoe plan.

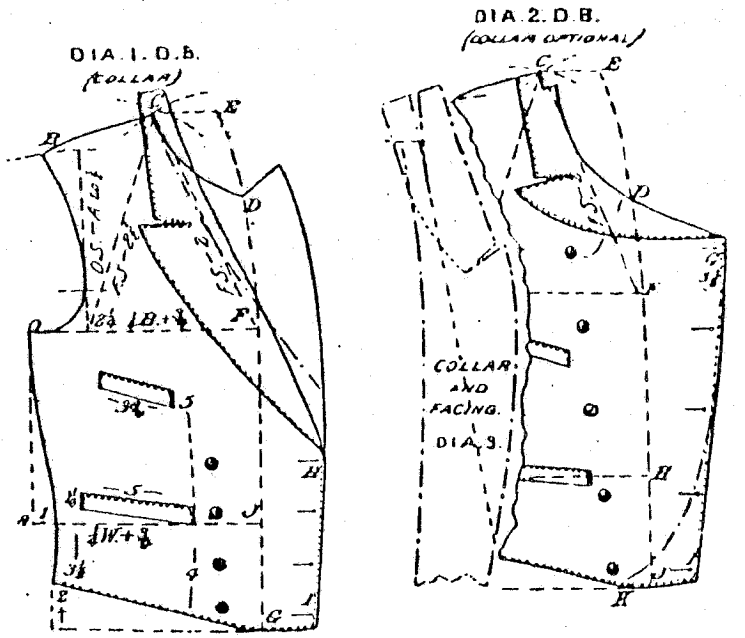
DOUBLE-BREASTED VESTS.

Double-breasted vests are cut in two styles: 1, those having the stand of the collar cut on; and, 2, those having a collar sewn on.

The former was very popular 2 or 3 years ago, but at present the older style is well to the front again.

DIAGRAM 1.

Draw line O F O 8.
O to 8 the same distance as 9, 17 of the back.
O to F one-fourth breast plus ¾ inch.
F to 2½ the across-chest measure less ½ inch. 8 to 1, 1 inch.
I to J one-fourth of the waist plus ¾ inch.
Sweep from 2½ by the front shoulder measure less ¼ minus the width of the back neck.



Add ½ inch to this quantity and sweep from F, and where the two segments cross each other indicates the position of the neckpoint.

Sweep from 2½ by over-shoulder measure less ¼ inch, minus the distance from ½ to A of the back.

C to B ¼ inch less than width of back shoulder.

C to E one-twelfth breast less ½ inch.

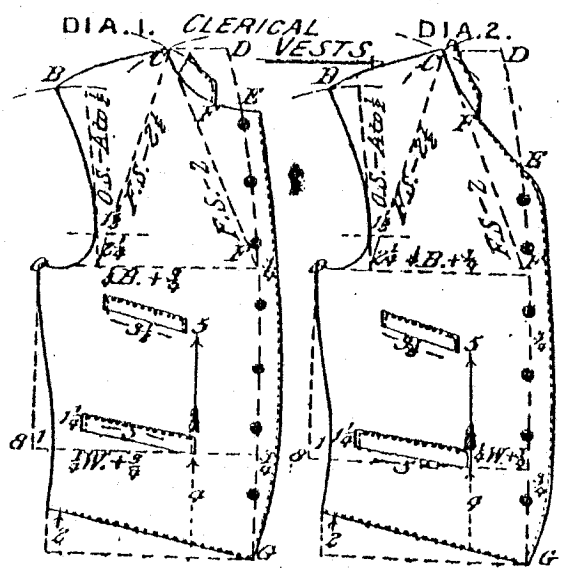
Measure off the length from C to F, or that point on the breast line indicated by the opening desired, allowing ¼ inch for seams and continuing from C to G the full length plus ¼ inch.

Square across from G, and shorten the side about 2 inches.

Curve up the front beyond G, so that it will harmonise at the bottom when fastened across the front. Make the width of lapel at H and I from 1¾ to 2¼ inches, and complete the upper part of lapel to taste. Sometimes the upper part of the lapel is made of Italian cloth, the forepart being cut as dot and dash line.

DIAGRAM 2

shows the D.B. vest with the stand of the collar cut on This is done by adding ¼ in. to the gorge at the neck (*see* step), and then shaping the opening to taste.



With this style the hollow crease row is a good deal used, and the vest may be made to button up very high.

A collar may be laid on if desired. The outline of the front is a matter of taste, and on this diagram we show two styles.

Dia. 3 shows the facing and collar cut in one for the style illustrated on Dia. 1. It is not often that a seam is put between the collar and facing, it being more convenient to make it up in one.

HINTS ON MAKING.

Care must be taken to place the buttons in the correct position, and to see that the two sides of the bottom overlap each other accurately. "Jigger" buttons are put on the inside of the left forepart to fasten the top and bottom holes, and so keep the forepart that goes under in its proper position.

The pockets must not be brought too forward. Buttons having shanks should be plugged on the left forepart to prevent wobbling.

CLERICAL VESTS.

Special features: S.B., finished at neck with stand collar, opening usually 2½ inches wide; number of buttons up from 7 or 8, according to length, more generally the latter number. For dress wear a lower opening, stand collar style, is used, and this is shown on Diagram 2.

DIAGRAM 1. THE SYSTEM.

Draw lines at right angles to O.

O to 8 same distance as 9, 17 of back.

8 to 1, 1 inch.

O to F one-fourth breast, plus ¼ inch.

F to 2¼ across chest measure less ¼ inch.

Sweep from 2¼ to find C by front shoulder measure less ¼ inch, less width of back-neck.

Add ¼ inch to this quantity, and sweep from F.

To find point E a measure is often taken from back-neck to any point near F, and then letting it go from the back-neck, and measuring up to E on the wearer.

C to D one-sixth of the neck.

2¼ to B the over-shoulder measure, less ¼ inch, less the back from 9 to A.

From 1 measure across one-fourth waist plus ¾.

Add on ¾ down front for button-stand.

Measure off length to measure taken, plus ¾ inch to G.

Square across to side and shorten 2 inches at side.

Complete as diagram, locating pockets and other details to measures given.

Diagram 2 is produced in the same way, only the opening is lowered as shown.

THE CLERICAL CASSOCK VEST.

Special features: The cassock is double-breasted, or, rather, it buttons far over on the right side; consequently it has a large forepart and a small forepart. It is usually finished with a fly down the front, and a stand collar at the neck, with an opening at front. The neck is kept close by a button, as shown just below D.

DIAGRAM 1.

This is drafted in the same style as previously described, with the exception of the front from K to J. D to K is from 1½ to 2 inches. The width of the bottom from the sideseam to I is from 3 to 4 inches.

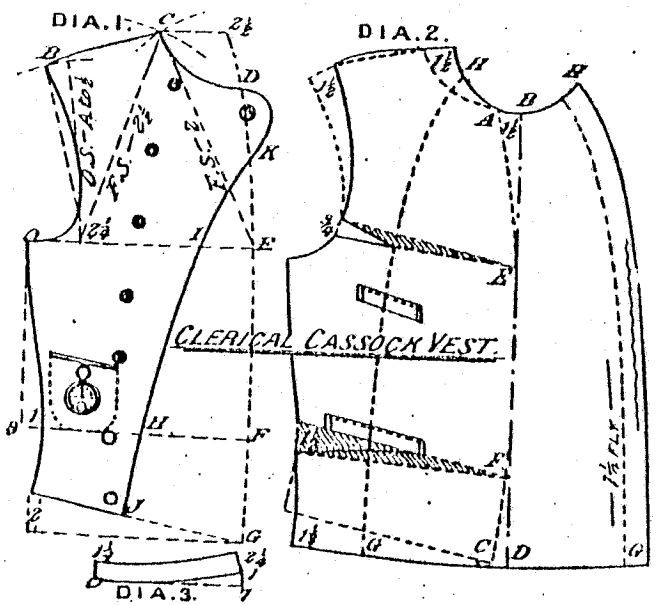


DIAGRAM 2.

Line B D is straight.

Put the upper part of the forepart pattern with the breast line on this, then mark round the neck, shoulder and scye. Now put the finger on E, and bring the breast line level with E F down to the mark; this will mean the insertion of a wedge as per shaded mark. Take out a V from the front of scye at ¼.

Now bring the breast line of the bottom part of the vest up to line at E D, which will mean the insertion of another wedge as per shaded mark, which compensate for by taking out a V across the pocket mouth, as shown by solid line.

Beyond line B D add sufficient to provide for buttoning over the buttons as marked, and complete as shown.

Diagram 3 shows the stand collar.

O 7 the length desired.

7 to 1 one inch.

O to 1¼ depth desired at back plus seams.

1 to 2¼ depth desired at front plus seams.

HINTS ON MAKING.

The outer edge of the large forepart must be drawn in. A watch pocket is often put on the small or right forepart, and two pockets in the left forepart.

The opening at neck is usually 2¼ inches.

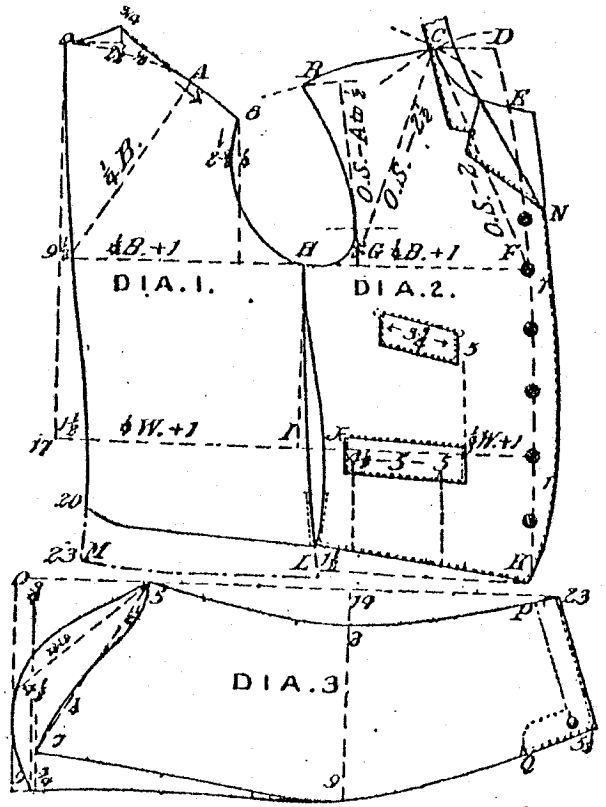
For dress wear these are made from corded silk. They are also made from the same material as coat for ordinary wear.

SLEEVE VESTS.

The sleeve vest requires a closer scye than an ordinary vest, and a sleeve with plenty of provision for the lifting of arm which means no hollowing of the underside. It should be reduced in size at both elbow and cuff, as compared with the coat sleeve, the size of the elbow being reduced at the forearm, and the cuff at the hind-arm. The sleeve-head is kept flat, but there must be plenty of size in it.

THE BACK. Diagram 1.

Draw line O 17.
O to 9 depth of scye.
O to 17 natural waist length.
From 17 mark in 1½.
Draw back seam from O through ½ and 1½ as shown.
Draw lines at right angles to O, 9, and 17.
O to 2½ one-twelfth breast less ½ inch.
Mark up ¾ and shape back-neck.
Sweep from O to 6, using point ½ as a pivot.
Make the width of shoulder from ¾ to 6 one-sixth of the breast.



Hollow shoulder one-eighth as shown.
½ to H one-fourth breast plus ¾ to 1 inch.
1½ to I one fourth waist plus ¾ to 1.
Complete back by these points.

THE FOREPART. Diagram 2.

H to F one-fourth breast plus ¾ to 1 inch.
F to G the across chest measure less ½ inch, or one-fourth breast less 1½ inches.
Sweep from G by a ¾ inch less than the front shoulder measure, less the width of back-neck.
Sweep from F by ½ inch more than this quantity. Where segments cross locates neck.
Sweep from G by ½ inch less than over-shoulder measure less ¼ A of the back.
Make C B a trifle less than ¾ 6 of the back.
C D and D E one-twelfth breast less ½ inch.
I J one inch.
From J measure forward one-fourth waist plus 1 inch.
Measure off length to opening plus ½ inch, from O to ¾ and C to breast line above N.
Measure off the full length to K plus 1 inch.
Square across from K and shorten at side 1½ inch.
Add on ½ to ¾ inch of button-stand beyond breast line and complete as shown.

THE SLEEVE. Diagram 3.

Draw line O 23.
O to 5 the same as from line drawn down from back scye at 6 to G.
O to ¾, three-quarters of an inch.
Locate pitches as follows: Back pitch 2 inches below the shoulder-seam; front pitch ¾ inch up from level of bottom of scye.
O to 9 size of top scye between the two pitches where the shoulder-seams are put in in a closing position.
Measure off length to elbow and cuff.
Hollow elbow at forearm 2 inches.
Make width of elbow about 1 inch more than one-sixth breast; cuff ½ inch less than one-sixth.

For the underside measure round the bottom of the scye between the two pitches and apply from 6 to 7.

Shape underside sleeve as shown, or even keep it straighter than shown.

HINTS ON MAKING.

The back is sometimes made longer, as per dot and dash line M L.

The buckle and strap should go right into the sideseam. A slit should be left at bottom of sideseam. The sleeve is generally made up with the lining and outside sewn together at the seams. The cuff is finished with one hole and button cuff.

The pockets should be of strong material, and may either be put in with welts or flaps.

The finish at the neck may be varied to taste. Many are made up with Prussian collars, others with no collar, buttoning high.

Some working-men have sleeve-vests made with D.B. fronts. Many coachmen have their vests made with sleeves. The great feature in them all is, avoid a deep scye; give plenty of sleeve; let the sleeve-head be flat, and the underside not hollow at all at top.

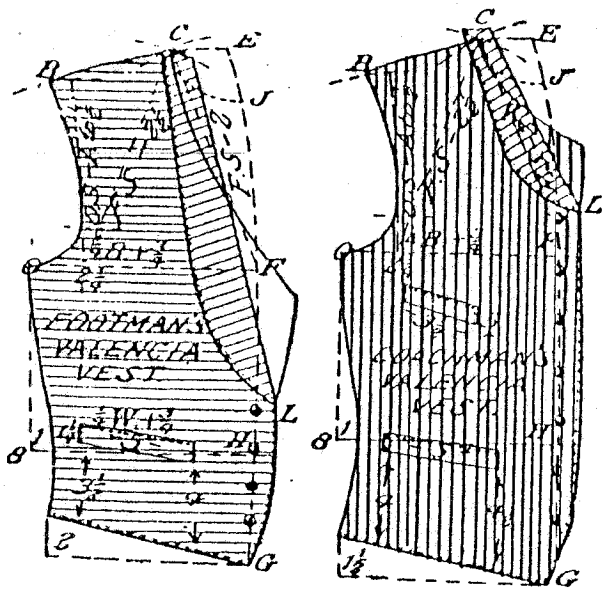
LIVERY VESTS.

The ordinary vests worn by livery servants are of the roll-collar type, the coachman's and groom's turning high enough to show a little above the crease edge of the coat, the footman's rolling lower, but also showing a little above the crease.

The material used may either be the same as the Frock or the Coatee, a bright colour cassimere, or more often a striped valencia.

When of striped material, the stripes are arranged vertically for coachmen and grooms, and horizontally for footmen.

There are usually seven buttons up the front of a coachman's vest, and four up the footman's, the coachman's being usually cut long.



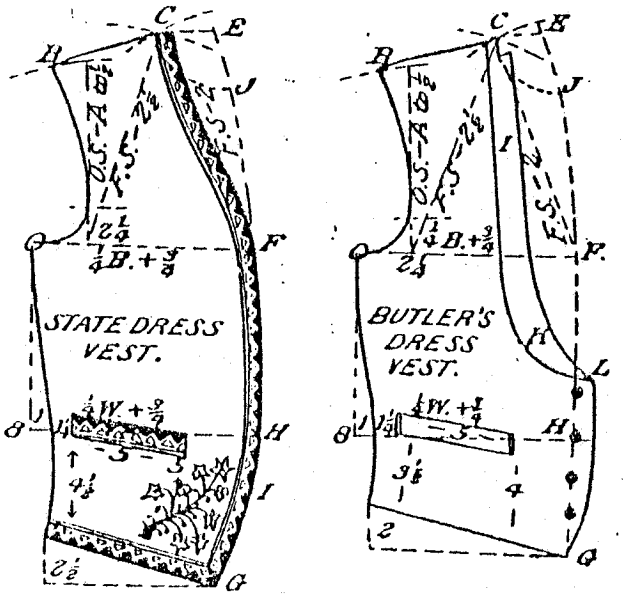
THE CUTTING

of these garments is on exactly the same lines as we have already explained, so that it is not necessary to describe the system again in detail. The special features of cut are all clearly portrayed in the diagrams.

The coachman's vest is often finished with sleeves, in which case follow the instructions already given for this variation. The sleeves are made of the same material as the back, which is usually silesia of as nearly the same shade as possible. The lining of livery vests is generally of self-colour, striped silesia being considered too fanciful for this purpose. When striped valencia is used for these vests, it is generally of the same colour as the bands on the foreheads of the horses; but in this respect definite instructions must be obtained from the customer, and changes are not often made; it will be well to find out what was used before.

THE LIVERY STATE DRESS VEST.

This is practically the same for both coachmen and footmen. It is cut in the no-collar style, sharply cut away at the



bottom, and of good length. The edges are trimmed with gold lace, and the fronts are fastened with hooks and eyes. The bottom of the forepart is embroidered in gold, in keeping with the coat. It is made of cassimere, usually of a light shade, often of white. Sometimes the pockets are put in with pointed flaps, but in that case the entrance to the pocket is at the back of the flap, and not under it.

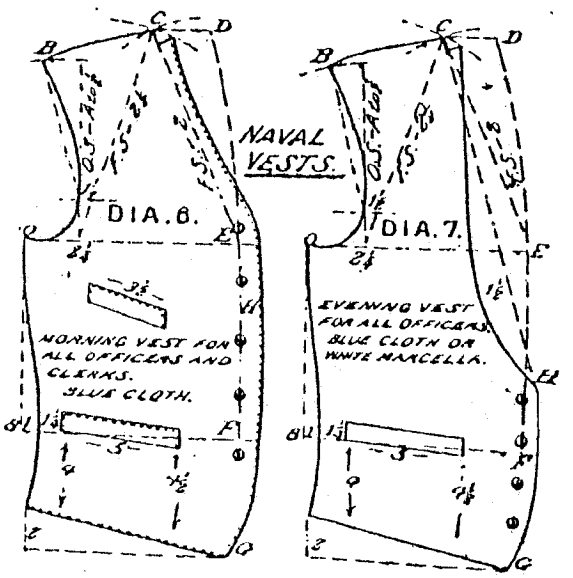
THE BUTLER'S VEST.

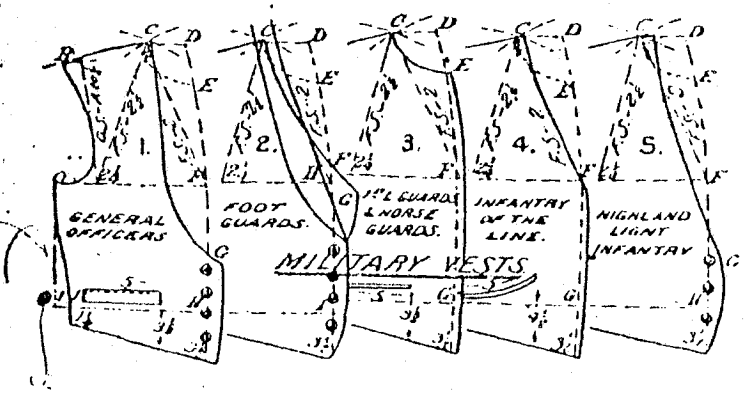
The dress vest of the butler is of the plainest description, and of more fashionable style. Thus the opening is a modified V-shape, the roll-collar being laid on.

The edges of the butler's vest are always finished plain, he being a notch above pipings, and a notch below cord, &c., so that the edges must either be bluff or neatly single-stitched.

MILITARY AND NAVAL VESTS.

It is essential that the tailor who anticipates orders of this class should be provided with the latest Naval and Military Regulations as issued by the Admiralty (Parliament


NAVAL VESTS.
DIA. 6.
MORNING VEST FOR ALL OFFICERS AND CLERKS. BLUE CLOTH.
DIA. 7.
EVENING VEST FOR ALL OFFICERS. BLUE CLOTH OR WHITE MARCELLA.



Street, S.W.) and the War Office (Whitehall, S.W.); and in addition to these it will be found an advantage if an old garment of the same pattern can be procured.

Another way of procuring the necessary information is to examine the sealed patterns which are kept as specimens at the above Government offices. The garments may be viewed

by tailors between the hours of 10 A.M. and 5 P.M., entirely free of charge, and those who are not very well up in this branch we strongly advise to avail themselves of this opportunity before attempting to cut their cloth, for whilst the regulations are practically complete, they do not give every little detail.

DIAGRAMS 1 TO 5

show how to cut the principal styles of mess vests. It must be noted that, as a rule, mess jackets extend 4 or 5 inches below the waist level in front, and 1½ to 2½ at the side, so that care must be taken to avoid the bottom of vest showing below the jacket. The depth of opening and style of front varies for the different regiments.

No. 1. For general officers the front is made no-collar, opening down to about 17 inches, and scooped out as diagram. It is finished with four buttons, and pockets across the waist. No. 2 portrays the roll-collar, with V-shaped opening, as worn by the Foot Guards. Four buttons are arranged below the turn, and the pockets are omitted.

No. 3 shows how the mess vest is cut for the First Life Guards and Royal Horse Artillery. Just sufficient is allowed on the edge to admit of the fronts meeting after the edges are turned in, and braid according to regulations is placed round the stand collar, down the edge, and along the pockets.

No. 4 illustrates the shape of the front for infantry of the line. A turning is allowed down the centre, and the opening extends to about the level of scye. Half an inch must be added at C for no-collar, and the pockets are jeated half-moon shape.

No. 5 portrays the tartan pattern vest worn by the Highland Light Infantry. The opening extends to 18 inches down, leaving sufficient length for three buttons, and in other respects it is made up as a plain no-collar.

Nos. 6 and 7. These diagrams, as far as the cutting is concerned, comprise all the variety worn by Naval officers.

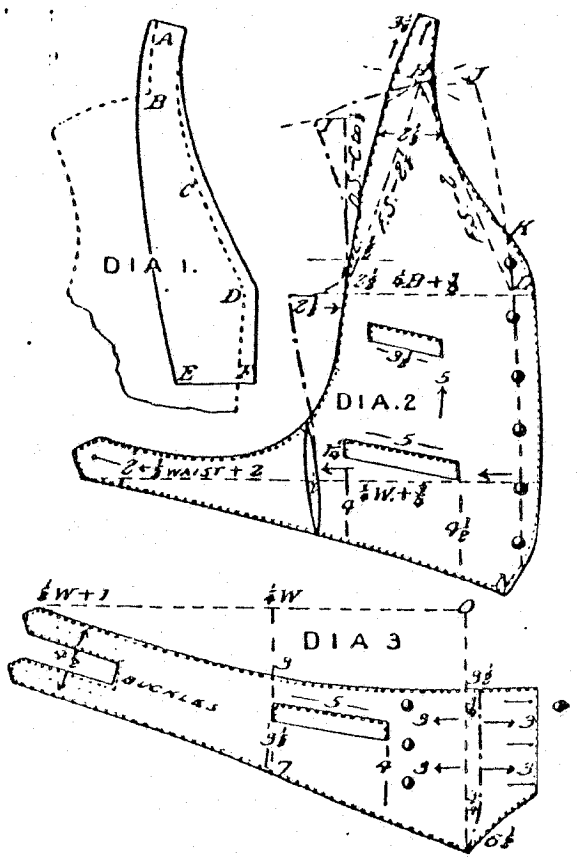
The morning vest is just a plain six-button no-collar style, with three welt pockets.

There are two styles of evening dress, one being made from blue cloth, and the other white marcella.

Some time ago ⅛ inch gold braid was placed round the edges and pockets of the blue vest, but this is now obsolete. The open vest is finished with four buttons and two pockets.

VEST SLIP.

Take the forepart of a vest as per dotted line of Diagram 1, then mark round the neck as shown at A B C D, and either continue the curve on to the length desired, or shape as per



solid line. Make the width at A about 1½ inches, and at E F 8 inches.

BACKLESS VEST. Diagram 2.

For summer weather, this deserves more attention than it usually receives. The forepart is continued round the back of the neck, where it is fastened with a hole and buttoned. The shoulder is then cut with a curve down to the waist, as shown by the solid line. The backpart merely consists of a band about 2 inches wide, which may either be fastened with a hole and button, or by buckle and strap.

This diagram is practically self-explanatory.

CUMMERBUNDS. Diagram 3.

These are made up in various styles, as belts and vests either S.B. or D.B. The diagram shows how these are cut. Draw line at right angles to O.

O to 3½, 3½ inches.

From O measure across quarter waist, and continue on to half waist, plus 1 inch.

From 3½ to 6½ is about 6 or 7 inches.

3 to 7, 4 inches.

Shape front to taste, and complete as shown.

Before concluding this section, there are a few items worthy of note that we have not yet touched on.

Vests, as a rule, harmonise so that they do not show above the crease row of the coat. During the past year or two this rule has, however, been more honoured in the breach than the observance, which is owing to the popularity of the low-rolling lapels.

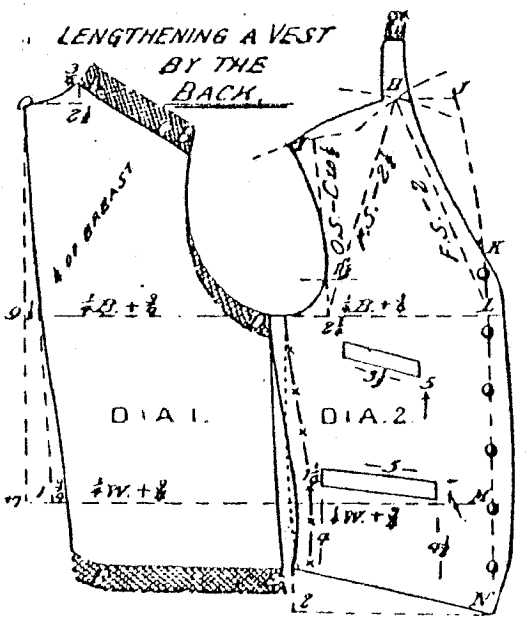
Another rule which has been ignored the past year or two is that D.B. vests should accompany D.B. coats, and so on. The popularity of D.B. vests has been such that they have been worn with all garments, and now that a reaction has set in, the S.B. no-collar vest seems to be the most popular style to wear with the D.B. Frock Coat. The length of the vest should harmonise with the waist seam of the Morning and Dress Coat, erring, perhaps, on the side of being a little longer than otherwise.

As a general rule there are six buttons up the front of an ordinary vest, and the present rule is for the bottom button to be placed 3½ inches up from the bottom, and the corners cut sharply away.

When guard-holes are put in vests they are usually put between the third and fourth holes from the bottom, though occasionally they are put one hole lower down.

Inside breast-pockets for carrying valuables are sometimes inserted in the left lining, and these are best put in with a welt, and finished with a button and hole, the button being either a flat pearl or a fly button.

For ordinary wear, vest backs should be of Italian cloth, as they wear well, and have a better appearance than silesia. The straps for the buckle should be of the same material as the back, and should start from the sideseam.



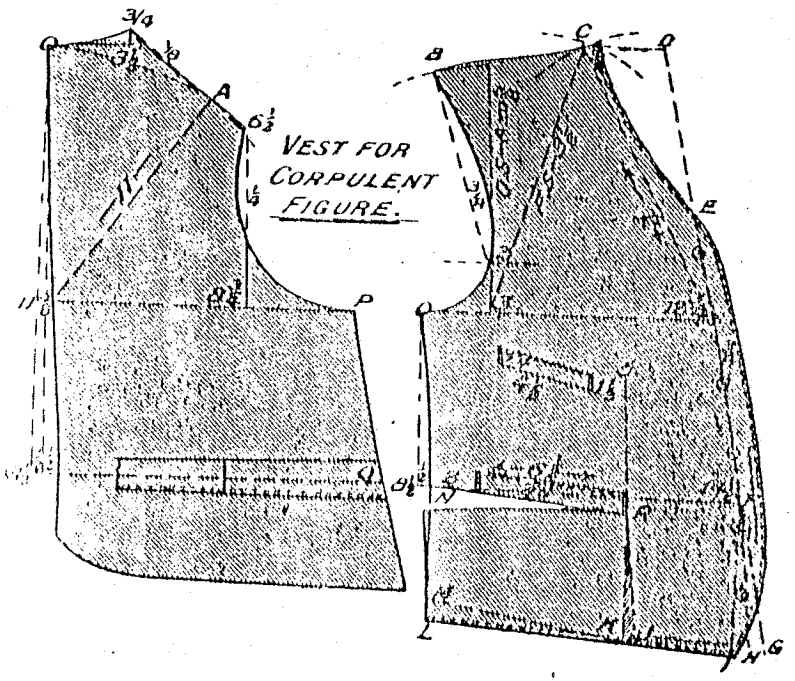
TO LENGTHEN VEST BY BACK. Diagram 1.

Suppose it is desired to lengthen back 1 inch, add on that quantity at A and B of back; lower the scye the same amount at D, and add on the same quantity at F E. This is easiest done by cutting a new back, but if there is an inlay on the shoulder, the extra length may be provided at bottom by joining on a piece under the buckle and strap. The back neck of the forepart must be lengthened 1 inch at G. The only drawback to this plan is that it makes the garment open 1 inch lower in front than it did before.

To vary the position of the seam under the arms may sometimes be necessary. This is easily done in moderation by adding to the back what is taken from the front, as shown on Diagrams 1 and 2.

CORPULENT VESTS.

The system, as laid down, works out admirably for disproportion, especially if the amount of hollowness at back waist



and side waist is reduced to ½ inch, but in addition it is advisable to take out a horizontal V from the pocket mouth as illustrated.

This may be done as follows: Draft the pattern in the ordinary way, mark the position of the pocket, and take out a V from the front end as shown by R K J, the amount taken out at K J being fixed by judgment. Now cut across the

pocket mouth to R N close up K J. This will produce an opening at N, and this is how the forepart is cut. If a rule is wanted for the amount taken out of K J, it may be found in the following: Draw the breast line from D to G. Now square down from F to I, and adjust the breast line to midway between I and G. This forms H. Now the distance from I to H is the quantity to take out of K J.

In making up take special care to draw in the front at F and bottom, as per wavy marks.

BOYS' VEST. DIAGRAM 3.

Boys' vests are generally cut in the no-collar style.
Draw line O 12. O to 6 depth of scye.
O to 12 the natural waist length.
Hollow back at waist 1 inch.
O to 2 one-twelfth breast.
Mark up ½ inch from 2.
Make 6 a pivot and sweep from O in the direction of A.
Width of shoulder one-eighth breast plus ½ inch.
6 to 6¼ one-fourth chest plus ¼ inch.
1 to 7½ one-fourth waist plus ¼ inch.
Shape back as shown, getting the full length from the front after it is completed.

THE FOREPART. DIAGRAM 4.

Draw lines at right angles to O.
O to 6 the distance from the depth of scye line to the natural waist line on the back.
Hollow waist at 6 one inch.
O to 6¼ one-fourth breast plus ¾.
I to 7½ one-fourth waist plus ¾.
6¼ to 2¼ the across-chest measure less ½ inch.
Make 2¼ a pivot, and sweep in the direction of C by the ½ inch less than the front shoulder measure, less O to ½ of the back.
Add ½ inch to this quantity. Make 6¼ a pivot and sweep again; and where the two segments cross each other locates the neckpoint, C.
Deduct ¼ inch from the over-shoulder measure, also the distance from 6 to A of the back, and sweep from 2¼, and so find B.

Make width of front shoulder a trifle less than the back. Shape scye.

C to D one-twelfth breast, and draw the breast line from D through 6¾ and 7½ to G.

Measure off the length to the opening at F, and the full length from C to G, allowing ¾ inch for seams.

Add on ½ inch at C for the stand of collar, and ¾ at front for button-stand.

Square the bottom by C H G.

Complete as diagram.

KNICKERS. DIAGRAM 1.

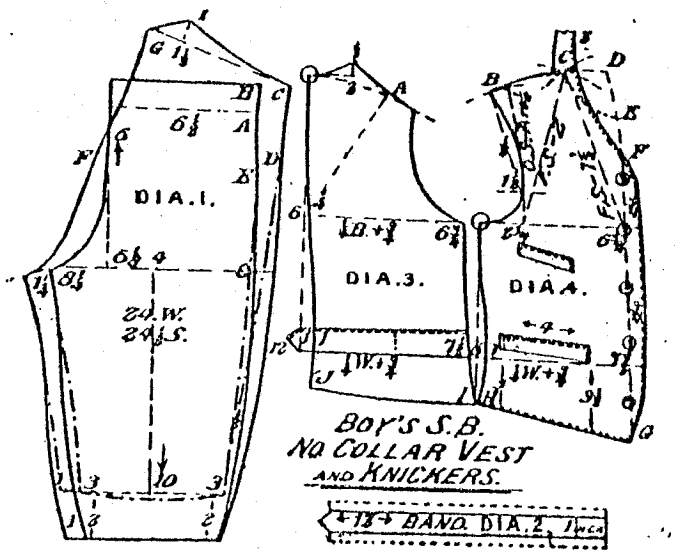
On this diagram we illustrate two styles: short trousers by dot and dash line, and knickers by solid line.

The latter are pouched over the knee, and drawn close to the leg by a garter.

Draw line O 8½.

O to 4 one-sixth seat.

O to 6⅛ one-fourth seat.



O to 8½ one-third seat plus ¼ inch.

Square up from 6⅛ and down from 4.

Measure down from 4 the length of leg, and in the case of knickers allowing 3 inches for fulling over.

Divide width of leg equally on either side of 10.

From 6⅛ measure up the body rise.

Make width at A one-fourth waist plus ¼ inch.

THE UNDERSIDE.

From 8½ measure out 1½.

6⅛ to 6 one-fourth seat.

Draw seat-seam from 8½ through 6.

Allow 1 inch for seams at the bottom of leg-seam.

Measure up waist to measure plus 1 inch.

Measure up seat to measure plus 1¼ inch.

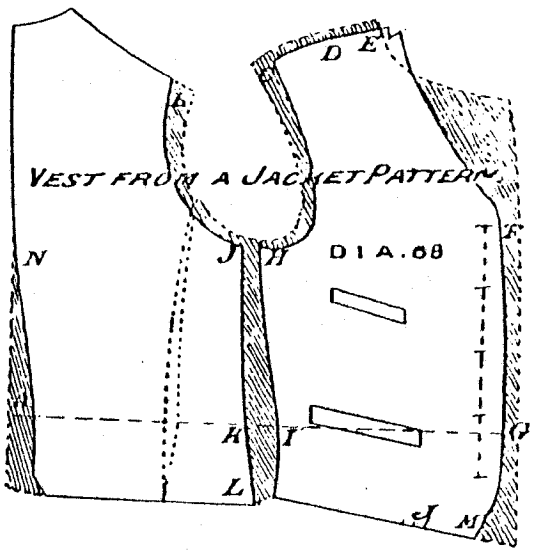
Square across to C by the seat-seam.

Come in from seat-seam 1½ and go up 1.

Complete as diagram.

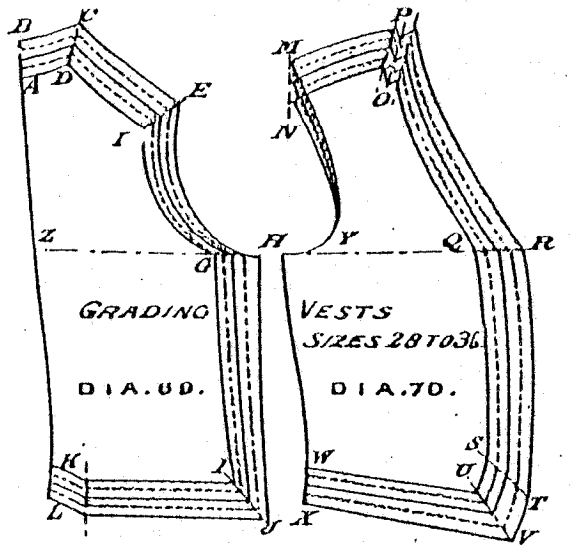
Diagram 2 shows the band into which the bottoms are drawn. A slit is often left at the bottom of sideseam.

The garter may either be made to fasten with a button or a buckle.



GRADING VESTS.

In order to make the process of grading still more simple we have arranged the patterns in two sets. Diagrams 69 and 70 show the variations between the



28 inch breast and the 36, whilst Diagrams 71 and 72 show the differences between the 36 and the 44 breast. It will be noticed in both these diagrams that the points are connected by straight lines along which the various points or divisions are marked and then connected up. In the diagram the alternate sizes are marked in dotted lines, but in drafting a full-size set it is best to use different coloured chalks as this greatly facilitates matters when it comes to cutting.

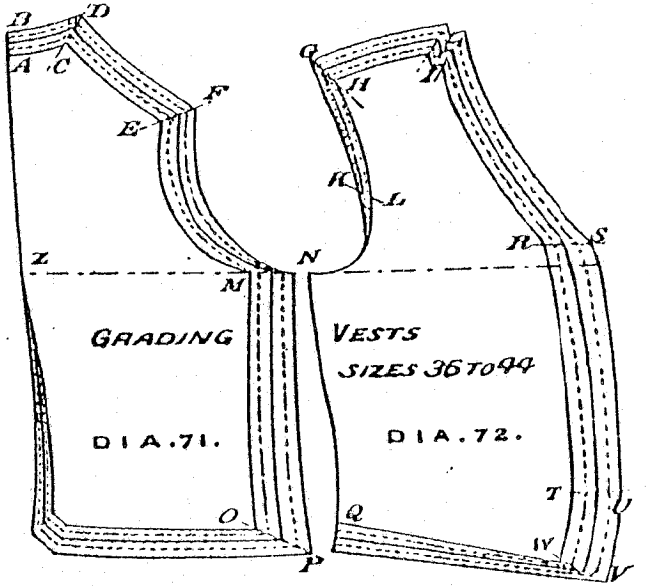
VEST FROM JACKET MODEL. DIAGRAM 68.

This, we have no doubt, will be found very useful to our readers, for it is very probable they may have patterns of jackets or coats which produce a good fit, and therefore, to produce the same depth of scye, height of neck, and balance, is worth a certain amount of consideration. Lay the jacket pattern down in a suitable position on the paper, and mark

the waist line so as to get the waist hollowed at the proper part. At N mark in ¼ inch and at the waist at A 1¼ inch. The latter quantity will have to be increased for a hollow-back figure, and filled up for the erect or flat-back type.

Mark in from N to J quarter of chest plus ¾, and on the waist line quarter of waist plus ¾ from A to K.

Reduce the length of shoulder-seam 1½ at B, and lower the scye ¼ inch at J.



When cutting the front, first locate point E, which is ¼ down and ¼ forward from the neck point of coat.

Draw the shoulder-seam ¼ smaller than the coat, and make the length of same ¼ less than the back shoulder-seam.

Shape the scye by advancing it ¼ inch at the forearm, and sinking ¼ at the depth of H.

At the front mark back ¾ at F and G, and then continue on to H, quarter of chest plus 1¼ on the waist line to I, quarter of waist plus 1½, which quantity is allowed for making up (¼) and button-stand (¼).

Now hollow the sideseam and mark off the opening, and full length as usual.

THE CUTTING AND MAKING OF CLOTH CAPS.

The diagrams given on next page are reduced models of some of the best shapes of the best makers. The golf cap at the top is very large and well pouched over, and, if reproduced by the ordinary inch-tape will give a pattern suitable for a size 7 cap, whilst larger or smaller sizes may be produced by the use of smaller or larger graduated tapes.

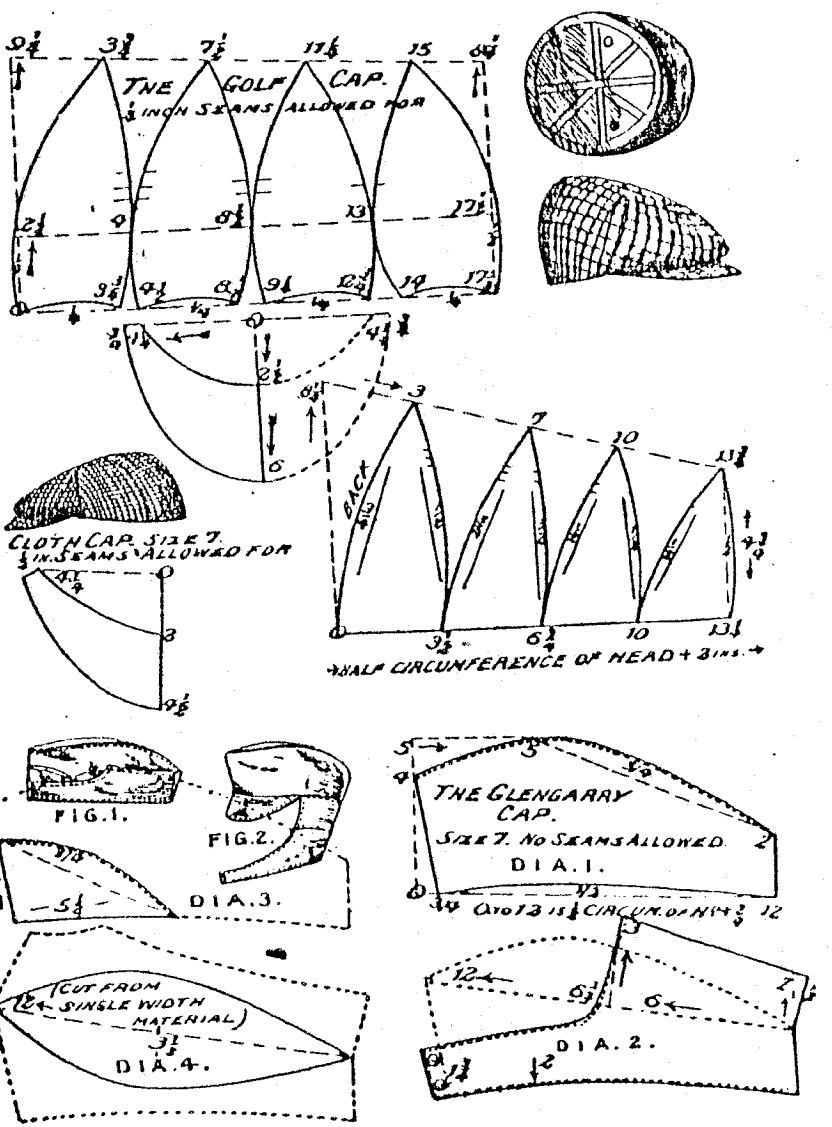
The simpler style of cloth cap is shown on the middle diagram; this comes well over the back of the head, and lies flat in the front. This diagram shows how to cut an eight-piece cap, but this may be varied by dividing the space between O and 13½ into three, instead of four, in which case 1¼ will be enough for seam-allowance. The smaller number of pieces is desirable when the seams are piped, as is often the case with school caps.

Variations in the style of peak can be produced by increasing the distance from O to 2, and reducing the width from O to 4½, whilst if a peak to come close over the eyes is desired, the variation may be reversed.

The Glengarry Cap is another variety which is very much adopted in military circles, and as it is quite a different type of cap, and has a back and ear-pieces, with strap to fasten under the chin, it is a very useful model.

In order to illustrate how patterns may be cut without seams added, we have prepared this diagram in that way, so that when cutting from the model it must be borne in mind that seams have to be provided for.

Diagram 1 shows the sides. Diagram 2 the ear-flap and chin-strap; the top part of this is attached to the bottom of the sides. Diagram 3 shows the peak, and Diagram 4 the crown, this latter piece only requiring to be cut on the single.

One of the most important parts of cap making is the pressing, and to do this properly a block somewhat in the shape of the head is neesssary.

The quantity of material usually taken for caps is as follows: plain cloth caps 9 inches of 27-inch cloth; golf-caps 13 to 16 inches of 27-inch material.